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ABSTRACT

Approximately 120 lessons for increasing sixth grade students' safety knowledge and skills as pedestrians in traffic and at school, as auto and school bus passengers, and as operators of bicycles are provided in this traffic curriculum. One third of the curriculum focuses on perceptual safety activities for young pedestrians, including lessons on visual and auditory perception and traffic laws, rules and procedures. The remainder of the curriculum consists of lesson materials concerning school bus, bicycle, auto passenger and school environment pedestrian safety. Throughout the curriculum, safety concepts and skills are taught through art, math, reading, research, science and social studies lessons. Auditory, bulletin board, and non-integrated safety activities as well as film and interview activities are included. While the lessons are arranged sequentially, they also can be used selectively. Additional features of the curriculum are (1) approximately 40 masters that can be reproduced for classroom use; (2) a cross reference list enabling the teacher to select activities in terms of safety area, integrated subjects, type of activity and/or type of skill taught; (3) a bibliography citing films and filmstrips, teacher preparation books and materials, curriculum and instructional materials, children's books and games; (4) a list of resource persons; and (5) learning activity and film evaluation forms. (Author/RH)

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SIS

INTERDISCIPLINARY TRAFFIC SAFETY INSTRUCTIONAL SYSTEM

SIS

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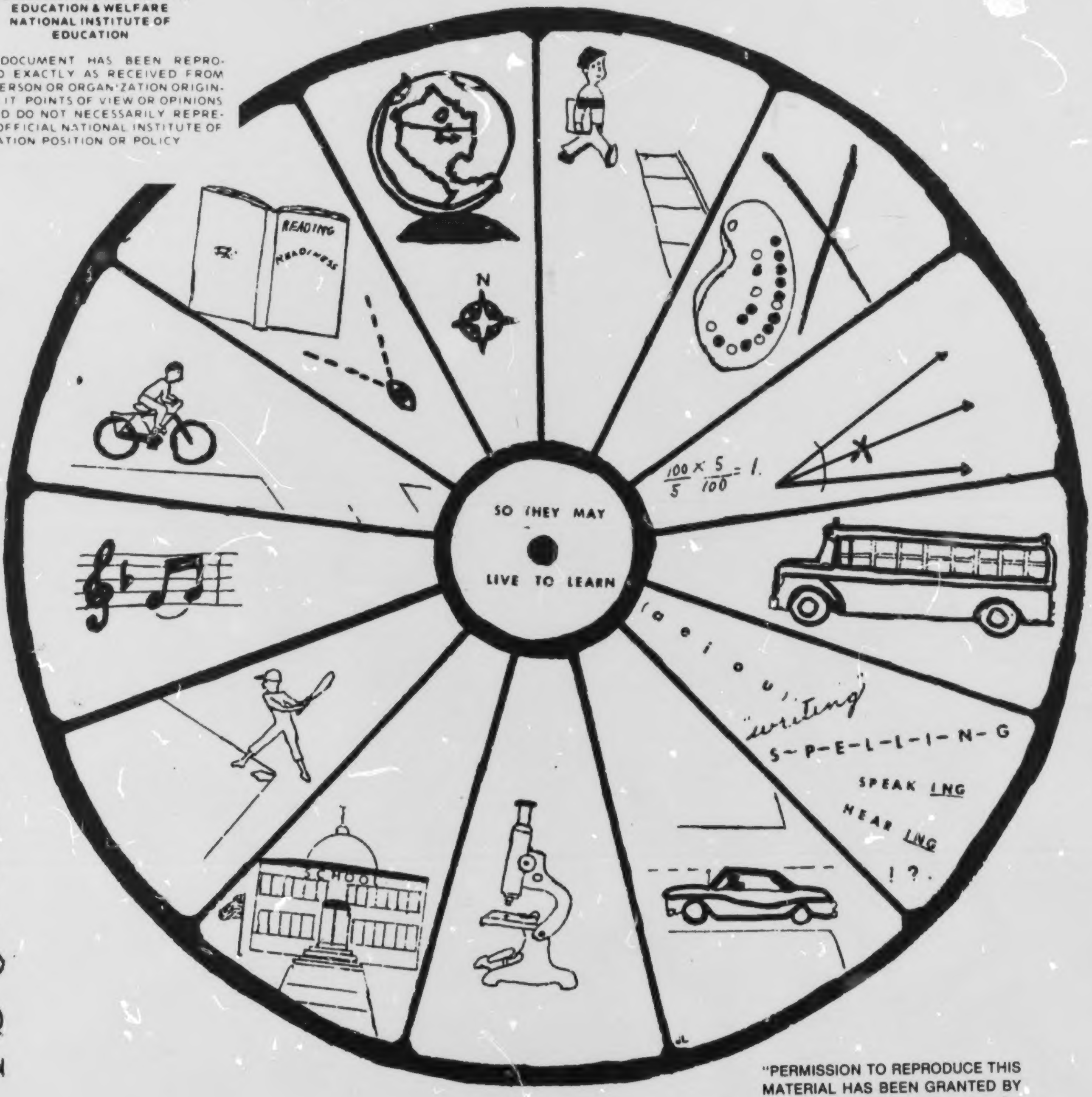
READING
READINESS
N
$\frac{100}{5} \times \frac{5}{100} = 1.$
SO THEY MAY
LIVE TO LEARN
a e i o u
"writing"
S-P-E-L-L-I-N-G
SPEAK ING
HEAR ING
! ? .
SCHOOL

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SERIES VI

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PRELUDE

This Safety Education Program encompasses the latest methods of the functional, visual perceptual motor approach to learning. It utilizes the disciplines of education, psychology, optometry and other related fields. It takes into account how children learn the concepts and precepts that they must rely on daily, in order to safely and successfully survive in a complex adult-engineered traffic world.

The survival, safety and success of children depends not so much on knowing a set of rules or regulations about safety, but by a systematic process of identifying, predicting, deciding and executing a specific behavior when confronted with a potentially dangerous situation. The child must first identify the hazard, predict what will occur if certain actions are taken or not taken and then, by calling on stored memory of past experiences, correctly decide on an appropriate action. Finally, he must then execute the best action or reaction to successfully manage the encounter. These encounters occur as children attempt to cross intersections, ride in the family auto or on the school bus. They happen in the home as well as the school environment, in the playground, athletic fields and when riding bicycles and motor equipment. This process of identifying, predicting, deciding and executing is largely triggered by visual inputs in order to cerebrally match data with stored memory traces that have been also visually acquired.

Although we receive information from other sense modalities such as hearing, touch, taste and smell, eighty five per cent of the information we have of the world around us is acquired through vision. Vision monitors and verifies the other sense data. We are aware then of the certitude of Arnold Gessell's statement, "Vision is the dominant sense..in order to know the child, we must know his vision."[1] It was Aristotle who said that there is nothing in the mind that didn't come through the senses. Chardin's adage, "To see or to perish",[2] exemplifies the importance of vision for survival. Survival and seeing are closely linked today as was for our progenitors who successfully slew the saber tooth tiger.

Many individuals have made significant contributions toward understanding the role of vision and its relation to the learning process. Some of the most outstanding people are: G. N. Getman*, A. M. Skeffington, George Crow, Harry Foug, Samuel Renshaw, N. C. Kephart, Darell Boyd Harmon, Robert Kraskin, Florence Sutphin, R. C. Orem, Ray C. Wunderlick, and many others. They all emphasize that vision is learned and has a necessary motor component. The latest interpreters of the writings of Jean Piaget * strongly endorse the thrust of education in this direction. We owe a debt to the professionals today who are concerned about learning and how best to arrange conditions for learning to occur. They dared to take a new tact, and follow convictions based upon sound principles.

It behooves us who have classroom and clinical responsibilities to bring the best methods and techniques to our children. We must also be aware of the models of learning and acquire skills of applying them in the classroom with the individual child.

We, in modern functional optometry, find a great sense of satisfaction in seeing our techniques and principles being utilized, for we know the soundness and effectiveness of this approach to the human organism. As Robert Kraskin so strongly urged, "We can, should and must use the principles and tools of the disciplines, but never use the methods of another profession."[3]

*For further identification, see page iv.

Modern optometric visual training has long stressed the fact that visual competency is a trainable skill that has ramifications in all human performance. Consequently, an interdisciplinary approach must be taken to insure maximum autonomy on the part of the developing child. Now more and more teachers are realizing the educational benefit to the child that comes from an interdisciplinary approach. Together we all must grow in the knowledge of how children learn to see, so they can survive safely and successfully in our sophisticated world. We call on you to be aware and alert to opportunities available today to make education the joy it must be if true learning is to take place.

Leonard T. Saltysiak
Optometrist

1. Arnold Gesell, Vision - *Its Development in Infant and Child* (New York, N.Y.: Harper and Brothers, 1949.)

2. Pierre Tielhard de Chardin, *Phenomenon of Man* (New York, N.Y.: Harper Textbooks, 1959.)

3. Robert A. Kraskin, *You Can Improve Your Vision* (Garden City, New York: Doubleday & Company, Inc., 1968.)

* Crow, George. *Basic Opthoptics and Reconditioning*. Duncan, Oklahoma: OEP Papers, 1952.

Crow, George, Foug, H. L. *Fundamental Principles of Visual Training*. Duncan, Oklahoma: Optometric Extension Program, 1938-1972.

Getman, G. N., Halgren, Marvin R., Kane, Elmer R., McKee, Gordon, W. *Developing Reading Readiness*. New York, New York: Webster Division, McGraw Hill Book Co., 1968.

Harmon, Darell Boyd. *Notes on a Dynamic Theory of Vision*. Austin, Texas: Privately published, Vol. 1, 1958.

Kephart, Newell C. *The Slow Learner in the Classroom*. Columbus, Ohio: Charles E. Merrill Publishing Company, 1971.

Kephart, Newell C., Strauss, Alfreda. *The Coordinated Classroom-12-Year Research Study*. Texas: Texas School System.

Orem, R. C. *Learning to See and Seeing to Learn*. Johnstown, Pa.: Mafex Associates, Inc., 1971.

Piaget, Jean. *The Child Companion of Movement and Speed*. New York: Translated from the French by S. E. T. Holloway and M. J. MacKenzie, Ballantine Books, 1969.

Renshaw, Samuel. *Children's Sleep*. New York, New York: MacMillan Co., 1933.

Skeffington, H. M. *Optometric Extension Program*. New York, New York: Papers presented at the Graduate Clinic Foundation, 1928-1972.

Sitphin, Florence E. *A Perceptual Testing-Training for First Grade Teachers*. Winter Haven, Florida: Winter Haven Lions Club, 1964.

Wunderlich, Ray C. *Kids, Brains and Learning*. St. Petersburg, Fla.: Johnny Reads, Inc., 1970.

INTRODUCTION

HOW TO USE THIS PROGRAM

The overall objective of this interdisciplinary instructional system for traffic safety is to provide an effective tool for training the young in the knowledge and skills needed to efficiently cope with the traffic environment. This program presents safety awareness and responsibility as a necessary "Way of Life" and not as a restrictive prescribed list of "do's" and "Don'ts."

This publication is divided into five safety content areas (See Table of Contents). Materials have been developed to provide sequential learning. An "a la carte" approach to selecting those activities which are specifically relevant to your students is encouraged. However, this publication is also designed to be used in a progressional sequence.

The following are specific characteristics of this instructional program that will assist you in its use:

1. A table of contents based on the concepts for each major safety area is located at the front of each grade level publication. This allows the teacher to choose those safety areas by content based upon the assessed needs of the student.

2. A cross reference is provided in the back of each grade level publication to allow selection of safety content by safety area, integrated subjects, type of activity and type of skill. Within the safety areas you may select lessons in a particular subject area or choose specific skills that are needed for your students, the lessons are further denoted as teacher directed, group or individual activities, see pages 150-160.

3. Special emphasis has been placed on the use of masters for reproduction. Each master has the directions for use on the back of it. Every master is designated by a title, letter and page number. The masters are listed in the cross reference under "masters for reproduction," as well as under each integrated subject.

4. A bibliography of films, teacher preparation, books and manuals, children's books and other related instructional material is provided. This listing contains most of the current books and materials that are related to this program. Most of these are available on a short loan basis from the Maryland State Department of Education, Safety and Transportation Phone: 796-8300, ext. 287.

5. An evaluation form is included for you to submit at any time you deem it appropriate, but especially at the conclusion of each school semester. Your evaluation is essential in order to adequately assess the effectiveness of this program for both the teacher and the student. These evaluations will be used as a basis for future revisions.

SAFETY INSTRUCTIONAL SYSTEM EVALUATION

Please be frank and constructive in completing this evaluation. Return a copy of this form at the end of each semester (or more often if you wish) to:

Maryland State Department of Education
Safety and Transportation
P. O. Box 8717, Friendship International Airport
Baltimore, Maryland 21240

Grade Level K 1 2 3 4 5 6
(Check One)

	GOOD	ACCEPTABLE	NEEDS IMPROVEMENT
1. Clear and concise presentation of concepts and content for the teacher.			
2. Concepts and activities suitable for grade level competencies.			
3. Format easily followed.			
4. Activities commensurate with objectives.			
5. Activities practical for application of content.			
6. Visuals adequately coordinated with lessons.			
7. Technical material appropriate to student comprehension level and teacher understanding.			
8. Interdiscipline approach to activities realistic and effective.			
9. Cross reference system effective and helpful.			
10. Bibliography and Resource Reference.			

11. Are more activities needed? ___YES ___NO. If yes, in what area? ________________

____

12. Please list any activities you feel should be excluded. ________________

____

13. How do you feel this publication is best used? ___A LA CARTE THROUGHOUT ___AS SUPPORT MATERIAL FOR OTHER SUBJECT AREAS ___AS A SEPARATE COURSE OF STUDY WITHIN THE SCHOOL WEEK ___AS OCCASION PRESENTS ITSELF

14. How do you plan to use this publication in the future? ___DAILY ___MONTHLY ___ONLY OCCASIONALLY ___NOT AT ALL ___OTHER (specificy) ________________

____

Please indicate your suggestions on the reverse side of this paper in any areas which you marked as needing improvement. Any other criticisms or comments are also appreciated.

SAFETY FILM CRITIQUE FORM

(SEE DIRECTIONS ON BACK)

CHECK ONE:

☐ BOY

☐ GIRL

NAME: ______________________________

CHECK ONE:

	YES	NO	UNDECIDED
1. Did you like this film?	☐	☐	☐
2. Do you think this film was effective?	☐	☐	☐
3. Do you feel the situations presented in this film were realistic?	☐	☐	☐

4. If answer to #3 is no, which situations were unrealistic and why?

____

____

____

	YES	NO	UNDECIDED
5. Did this film supply you with new information?	☐	☐	☐
. Could you identify anyone in this film as representative of people you know?	☐	☐	☐
7. Would you like to see other subjects use this film technique for instruction?	☐	☐	☐
8. Do you think viewing this film will cause you to change some of your behavior?	☐	☐	☐

9. If answer to #8 is yes, in what way will you change your behavior?

____

____

10. If answer to #8 is no, why will you not change your behavior?

____

____

If you wish, place any additional comments on the back of this sheet.

SAFETY FILM CRITIQUE FORM

DIRECTIONS

THE FILM CRITIQUE IS DESIGNED TO BE USED WITH THE SAFETY FILMS LISTED IN THE BIBLIOGRAPHY. AFTER THE CRITIQUE HAS BEEN COMPLETED, THE STUDENTS CAN TABULATE THE RESULTS AND REPORT THEM TO THE CLASS. VARIATION: HAVE THE CHILDREN SUGGEST ACTIVITIES AND/OR REPORTS THAT CAN BE MADE FROM INFORMATION GAINED FROM THE CRITIQUE.

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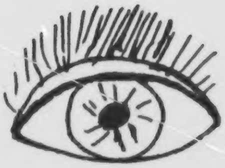
PEDESTRIAN PERCEPTUAL SAFETY ACTIVITIES



UNIT OBJECTIVES:

Through developmental perceptual training activities, the student will be able to acquire the basic perceptual skills necessary to the pedestrian task.

A totally coordinated body is necessary to function efficiently in the complex traffic world.

All senses must be developed and trained to cope with the traffic environment to ensure maximum efficiency.

OBJECTIVE: Utilizing his everyday experience with sounds, the student will be able to distinguish between active listening and passive hearing.

CONCEPTS TO BE DEVELOPED:

1. Listening is an active process which elicits some kind of interpretative response from the learner.
2. Interpretative response is determined by the process of listening.
3. Purposes of listening are: information, enjoyment, appreciation and evaluation.
4. Sensitizing students to significant sounds in the traffic environment.

1. DO YOU GET THE MESSAGE ? On chalkboard place the chart below. Discussion follows.

ACTIVITY	PURPOSE	RESPONSE
Listening to oral reading of a story. (Select any short selection appealing to your particular group.)	Listen for information	Assimilate details of story
	Listen for enjoyment	React to mood that author creates.
	Listen for evaluation	Discriminate between fact & fancy

2. LISTENING FOR INFORMATION - Listen to classmates give directions for:

   a. Baking a "packaged" cake.

   b. Locating an entry in the dictionary.

   c. Mixing tempera paint.

   d. Playing a game.

   e. Procuring from the library a particular book of fiction.

   f. Summoning the fire department.

   g. Treating a cut finger.

   h. Walking from school to the nearest public library.

3. LISTENING FOR ENJOYMENT (Use of radio or tapes) - Discuss and identify the following as examples of hearing or as examples of listening:

   a. Being aware of music (hearing).

   b. Being aware of persons' voices (hearing).

   c. Identifying with characters in a drama (listening).

   d. Objecting to the sales pressure used in a commercial (listening).

   e. Predicting the outcome of a dramatic presentation (listening).

   f. Enjoying the humor of a joke.

   Differentiate between background sounds and those sounds which stimulate mental and physical activity.

4. LISTENING FOR EVALUATION

   a. Detecting sales pressure.

   b. Discriminating between fact and opinion.

   c. Consciously interpreting traffic sounds and reacting to them.

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5. EVALUATION CHECK - Do the students see the relationship between response to listening and purpose for listening? If this evaluation is successful, present the following chart and see if students can interpret it.

TRAFFIC SOUNDS	
HEARING -	Mere recognition of the sounds of the moving vehicles.
LISTENING -	Reaction to and interpretation of significant sounds: - Association of policeman's whistle with the direction of traffic. - Identification of screeching tires and honking horns. - Realization of the amount of traffic.

6. DISCUSSION - Contrast the sounds that were heard with the sounds that demanded the listener's attention.

   a. Why is this especially significant in the traffic environment?
   b. Where is this concept also especially important?
   c. Who is responsible for making this distinction?
   d. When are we trained to have the ability to make this distinction?
   e. What can you do as an individual to improve your ability to distinguish sounds.

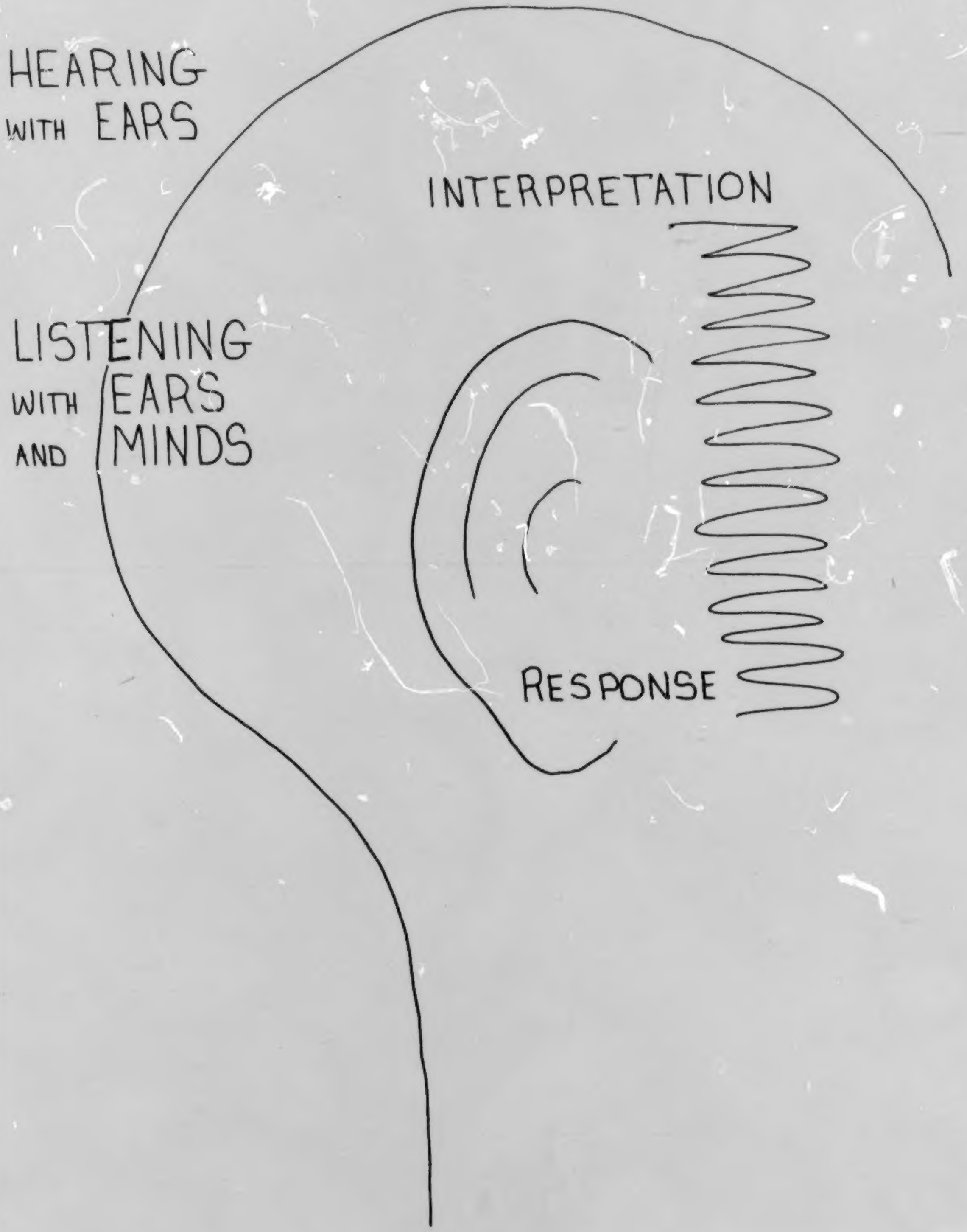
7. MASTER FOR REPRODUCTION

   A - Hearing with Ears

8. NOISE UNIT - Lead-up questions:

   a. Over what decibel level does noise pollution become defective?
   b. What can be done about noise pollution?
   c. What is being done about it?
   d. What rate of pollution (noise) does an ordinary car contribute?
   e. How do you as an individual contribute to the pollution?
   f. What can you do about it?

HEARING WITH EARS


HEARING
WITH EARS
LISTENING
WITH EARS
AND MINDS
INTERPRETATION
RESPONSE

C

MASTER FOR REPRODUCTION A

HEARING WITH EARS

DIRECTIONS

Have students write an interpretation of the illustration in relation to the concepts.

FROM: Chicago Public Schools

17

OBJECTIVE: The student will be able to make an auditory differentiation between a significant traffic noise and an insignificant background noise in the traffic environment.

CONCEPTS TO BE DEVELOPED:

1. Sounds help people.
2. Sound travels much more slowly than light.
3. Sound travels about 1/5 mile a second (about four city blocks) in air.
4. Sound travels at a fast rate of speed.
5. In a wind instrument, a column of air vibrates inside the instrument to produce sound.
6. The length of this air column can be varied to produce tones of different pitch.
7. The longer the column of air, the lower the pitch; the shorter the column of air, the higher the pitch.

MASTERS FOR REPRODUCTION

B-Math Problems Dealing with Sound
C-How Sounds Help People

B

MATH PROBLEMS DEALING WITH SOUND

Speed of Sound in Air - 1,100 feet per second

Speed of Sound in Liquid or Water - 4,800 feet per second

Speed through Solids (Wood) - 11,100 feet per second

Speed through Solids (Steel) - 16,500 feet per second

Speed through Solids (Aluminum) - 17,000 feet per second

1. How long would it take sound to travel from one end to the other of a piece of steel 10 miles long?
2. How long would it take sound to travel seven miles under water?
3. How much faster does sound travel through aluminum than through wood?

Sound travels rapidly, but not as fast as light. We see the flash of lightning before we hear the thunder. Figure the distance of a lightning flash by using the difference between the speed of light and sound. Use a time chart such as the following:

Time between lightning and thunder	Distance of lightning flash
5 seconds	1 mile
10 seconds	2 miles
15 seconds	3 miles
20 seconds	4 miles

MASTER FOR REPRODUCTION B

MATH PROBLEMS DEALING WITH SOUND

DIRECTIONS

Give children handout. With given information on light and sound, ask the children to solve the problems.

20

RESEARCH QUESTIONS-HOW SOUNDS HELP PEOPLE

1. HOW CAN SOUND BE USED TO CURE PEOPLE?

2. WHAT IS CLEANED BY THE USE OF SOUND?

3. HOW DOES SOUND HELP IN ROASTING?

4. HOW DOES SOUND HELP US IN THE MORNING?

5. HOW DOES RADIO ASTRONOMY HELP?

6. HOW IS SOUND USED TO TELL IF COAL MINES ARE SAFE?

7. HOW DOES SOUND HELP US CROSS THE STREET?

8. HOW DOES SONAR HELP US?

9. HOW DOES A FIRE ALARM HELP US?

FROM:

EDUCATIONAL SERVICE, INC.
STEVENSVILLE, MICHIGAN

21

MASTER FOR REPRODUCTION C

RESEARCH QUESTIONS - HOW SOUNDS HELP PEOPLE

DIRECTIONS

Give children the handout. Have the children read the questions. Allow them time to research those they need additional information on. Reports or a discussion may be a follow-up to the research.

ANSWERS:

1. Ultrasonic vibration assists in cancer cure.
2. Buildings, clothing, etc.
3. A time clock sounds when the roast is done.
4. An alarm awakens us.
5. Radio waves from stars help to tell their size, distance, etc.
6. Pipes are tapped on and the sound carries from one section of the mine to another.
7. Car horns and automobile noise.
8. By plotting the depth of the ocean, finding schools of fish, submarines, etc.
9. It indicates danger and will help us get to safety instead of being caught in a fire. It might call the fire department.

OBJECTIVES:

1. Given a series of visual situations involving typical traffic problems, the student will select appropriate behavior and supply the rationale for his behavior selection.

2. Given a series of exercises including the visual identification of the square, triangle and rectangle, the student will be able to visually determine the number of each.

INTRODUCTION

The following activities are exercises in visual discrimination and visual perception.

1. MASTERS FOR REPRODUCTION

D - Shape Recognition - Square

E - Shape Recognition - Triangle

F - Shape Recognition - Rectangle

G - Selecting Differences

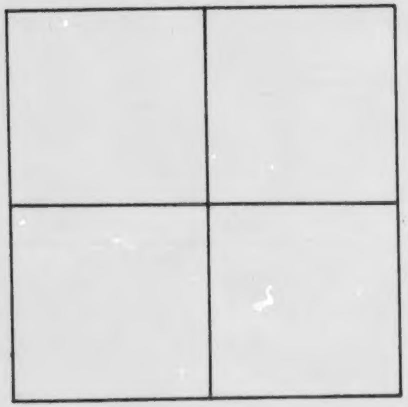
H - Pedestrian Path

I - Situation Planning

SHAPE RECOGNITION - SQUARE

A

B



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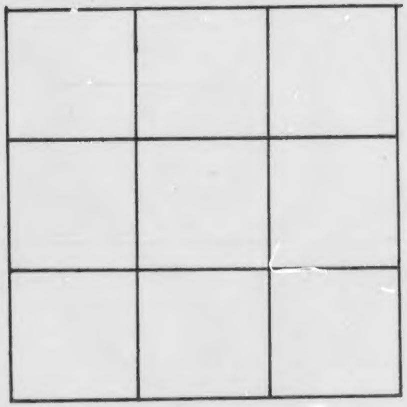

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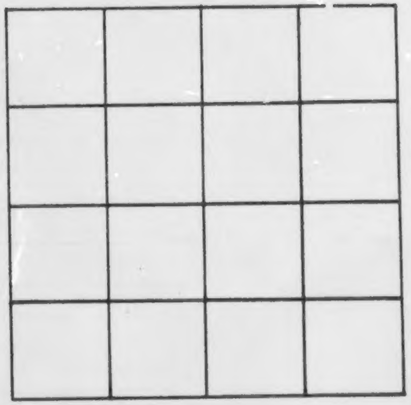


MASTER FOR REPRODUCTION D

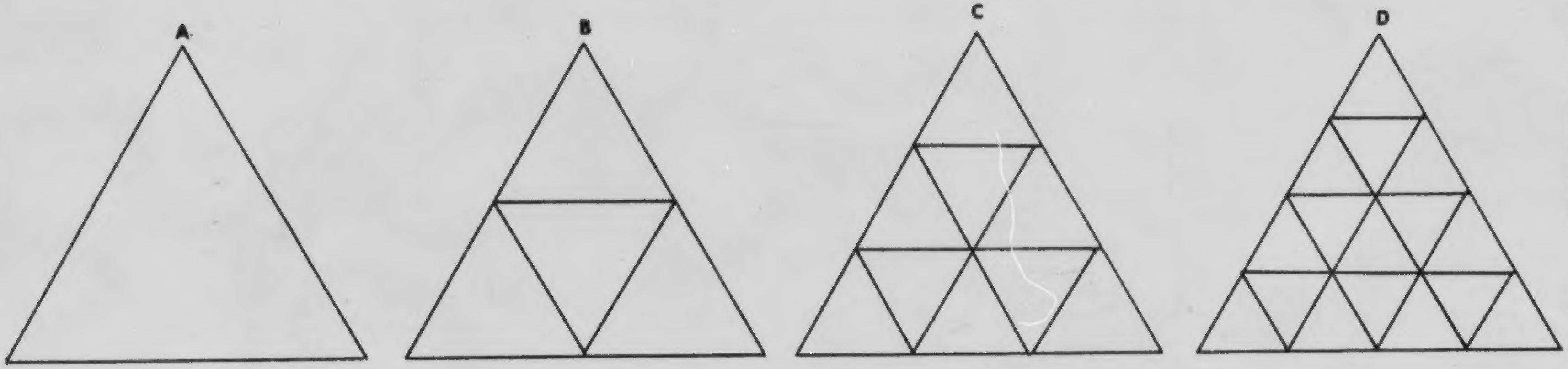
SHAPE RECOGNITION - SQUARE

DIRECTIONS

Have the students identify the first basic shape. (A square)

In each of the following diagrams, ask the students to see how many squares they can locate in each. (There is one in A, five in B, fourteen in C, and thirty in D.

SHAPE RECOGNITION - TRIANGLE



E

MASTER FOR REPRODUCTION E

SHAPE RECOGNITION - TRIANGLE

DIRECTIONS

Have the students identify the first basic shape. (A triangle)

In each of the following diagrams have students see how many triangles they can locate in each. (There is one in A, five in B, thirteen in C, and twenty-seven in D.)

F

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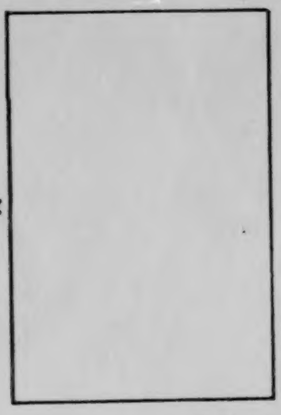
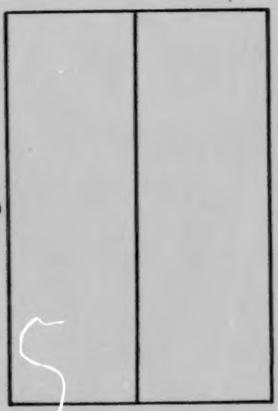
SHAPE RECOGNITION - RECTANGLE

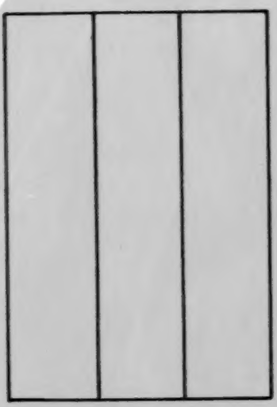
A



B



C



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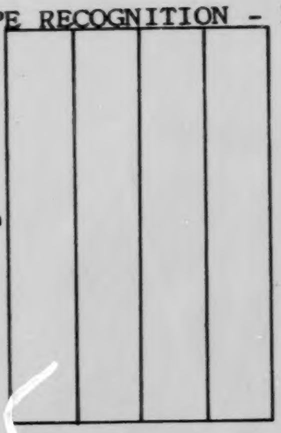


30

MASTER FOR REPRODUCTION F

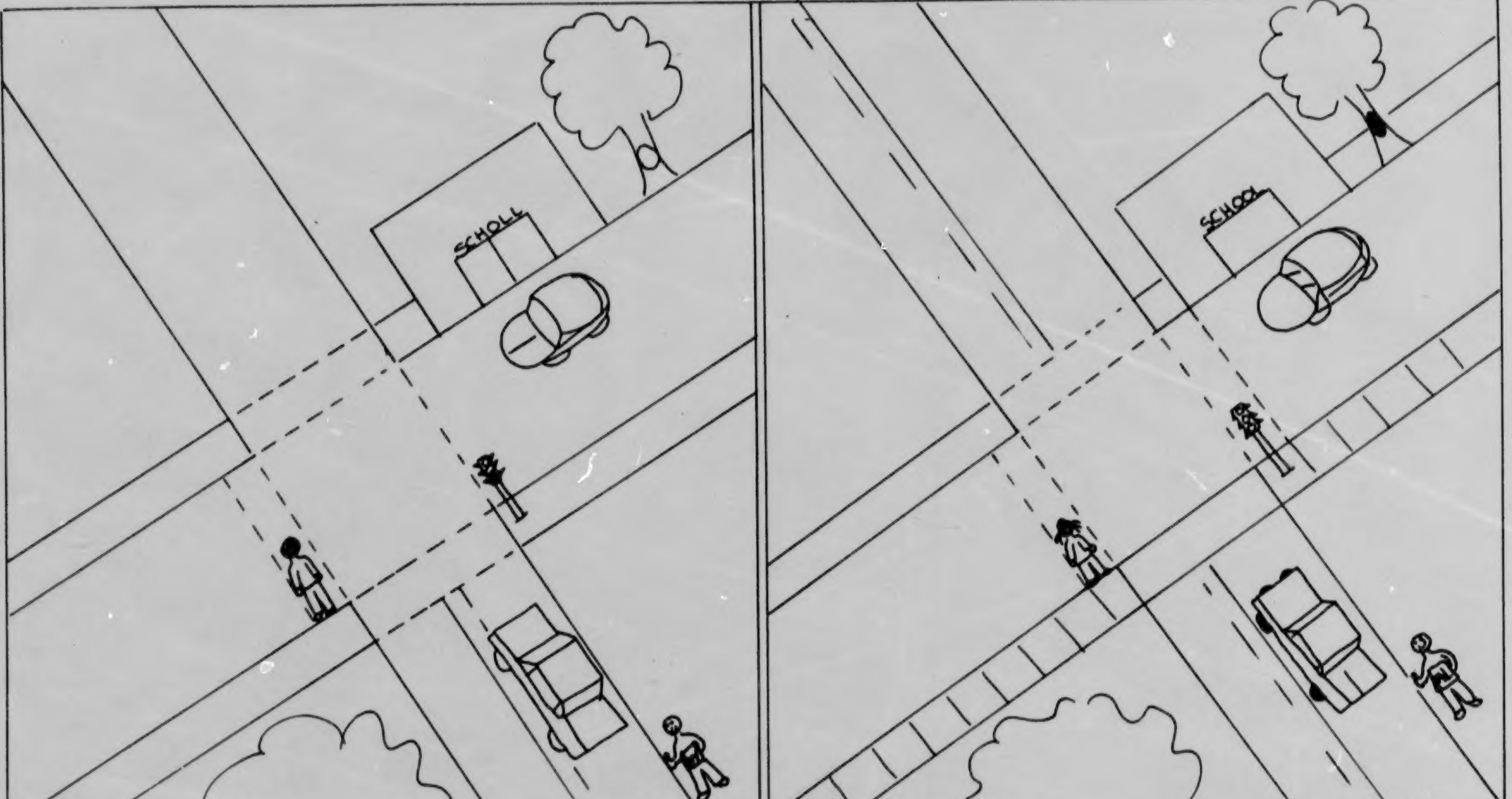
SHAPE RECOGNITION - RECTANGLE

DIRECTIONS

Have the students identify the first basic shape. (A rectangle)

In each of the following diagrams, see how many rectangles they can locate in each. (There is one in A, three in B, six in C, and ten in D.)

SELECTING DIFFERENCES

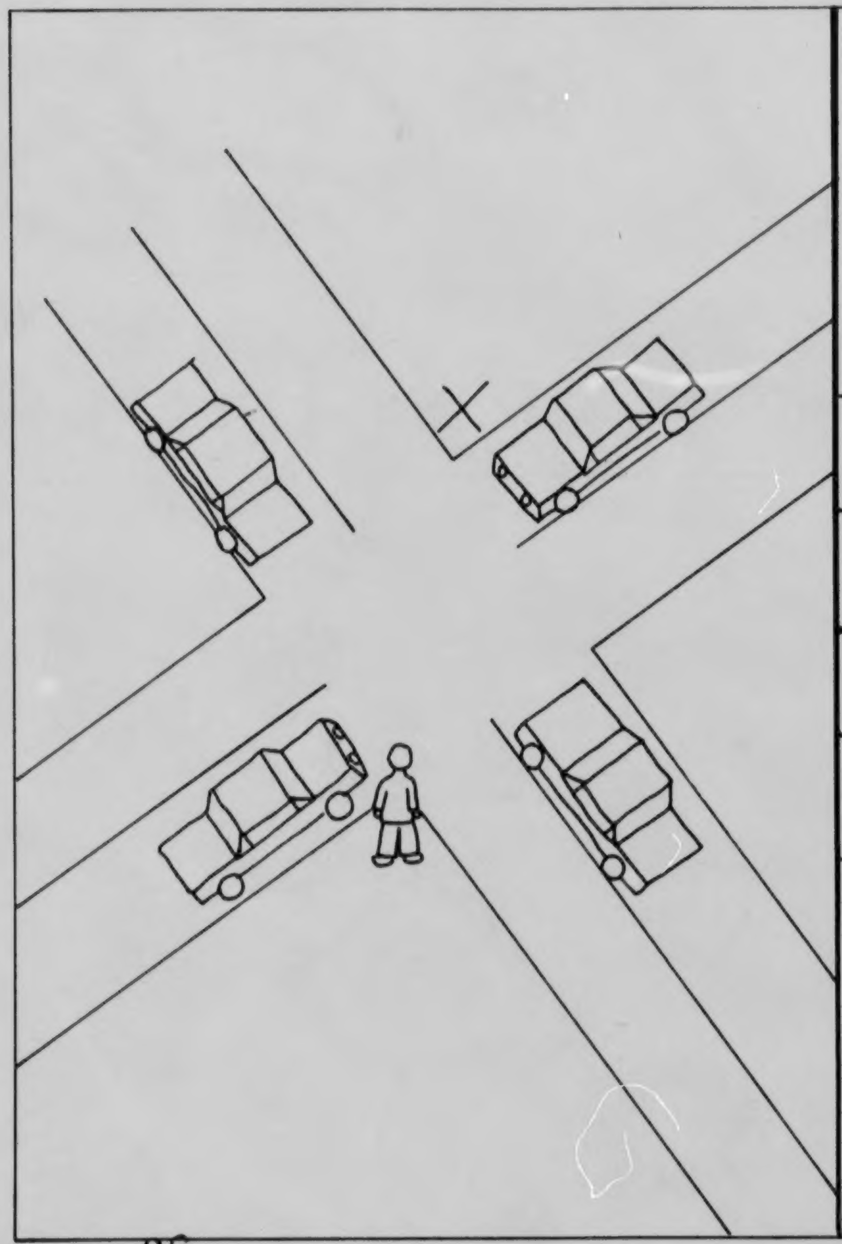

SCHOLL
SCHOOL

MASTER FOR REPRODUCTION G

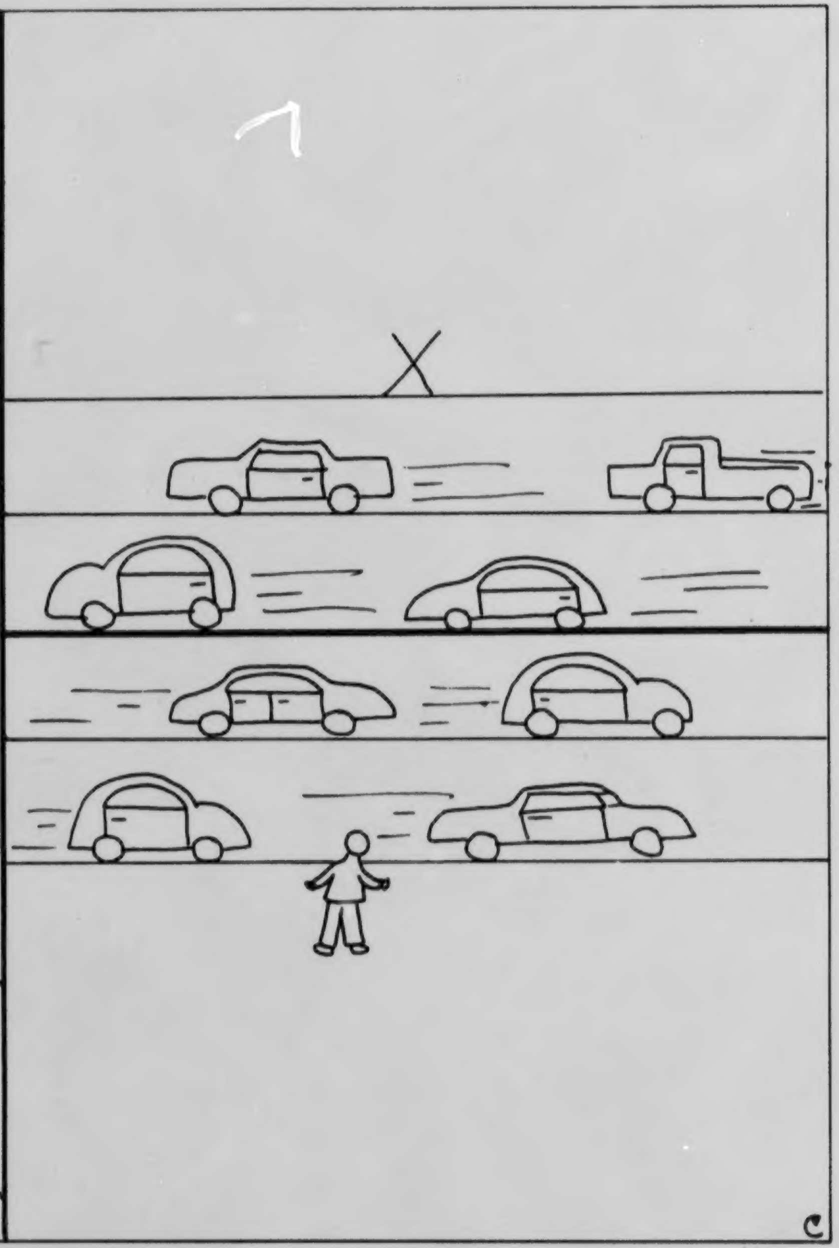
SELECTING DIFFERENCES

DIRECTIONS

Have students place a (✓) on whatever is the same in both pictures and an (✗) on whatever appears in only one picture.



36


PEDESTRIAN PATH
C

37
H

MASTER FOR REPRODUCTION H

PEDESTRIAN PATH

DIRECTIONS

In the pictures below a pedestrian is trying to get across to the point marked with an X. Select the picture depicting the possibility of a safe crossing and trace the best pedestrian path. On the back of this sheet write why you selected that picture as opposed to the other one.

SITUATION PLANNING

DRAW A PLAN OF AN AREA OF YOUR OWN DESIGN. DESIGN IT WITH AS MANY INTERSECTIONS, CORNERS, CROSSWALKS, SIDEWALKS, CURBS, PEDESTRIANS, VEHICLES, STREETS OR ROADS AS YOU WISH. HOWEVER, MAKE UP YOUR OWN SIGNS FOR INFORMATION AND DIRECTION IN THIS AREA. BE SURE TO PLACE THEM WHERE THEY BELONG SO THAT THEY CAN BE EASILY READ. KEEP IN MIND THE FOLLOWING:

1. ARE YOUR SIGNS MEANINGFUL?

2. DO THEY ACCOMPLISH YOUR PURPOSE?

3. ARE THEY EASILY UNDERSTOOD?

MASTER FOR REPRODUCTION I

SITUATION PLANNING

DIRECTIONS

Distribute handout. Ask students to design a traffic area and to include traffic related items.

40

OBJECTIVE: The student will be able to accurately select the reference point (for cars to be behind) that will allow maximum time to cross a street.

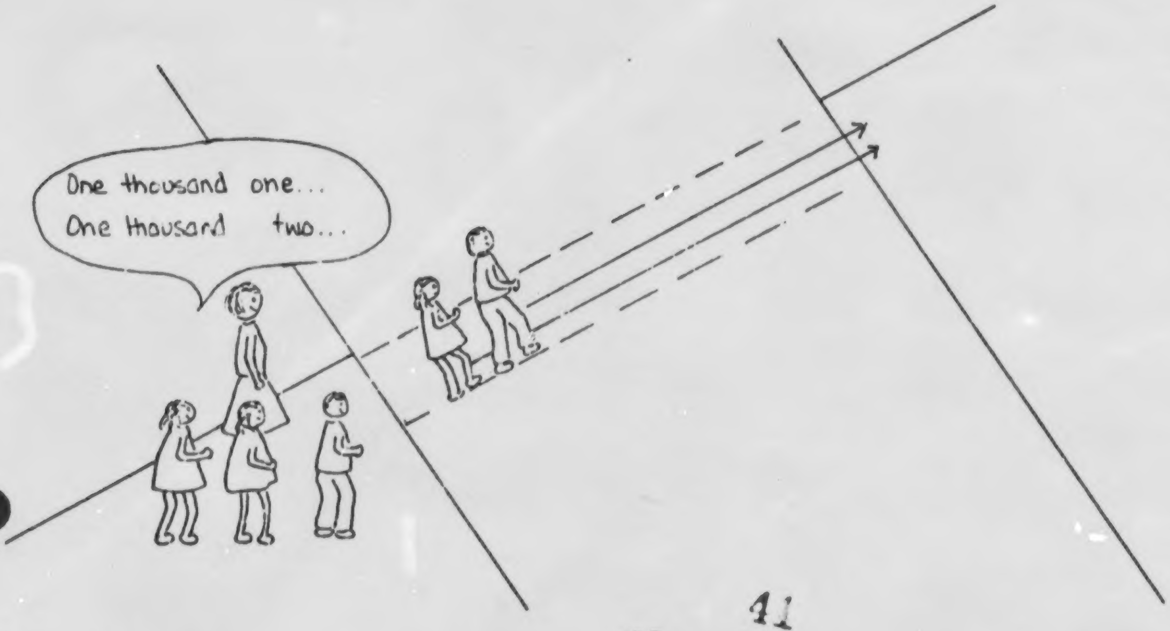
STEP ONE: The student must be able to count in "second" intervals; i.e. one-thousand-one, one-thousand-two, etc.

PROCEDURE: Using a large clock with a second hand, have students count as a group, one-thousand-one, etc., in unison with the second hand. Fourteen seconds is enough. This procedure must be practiced until the students have the ability to count accurate seconds.

STEP TWO (STREET): The student must be able to determine the time that it takes him to cross a street. Approximate timing is as follows:

4-lane street: 12-14 seconds
2-lane street: 10 seconds
1-lane street: 6-8 seconds

Using a street without much traffic, have the students (2 or 3) walk across the street while the rest of the class is counting. The time will be representative of most of the class. Students must understand that this is the time they must have in order to get across a street safely.


One thousand one...
One thousand two...

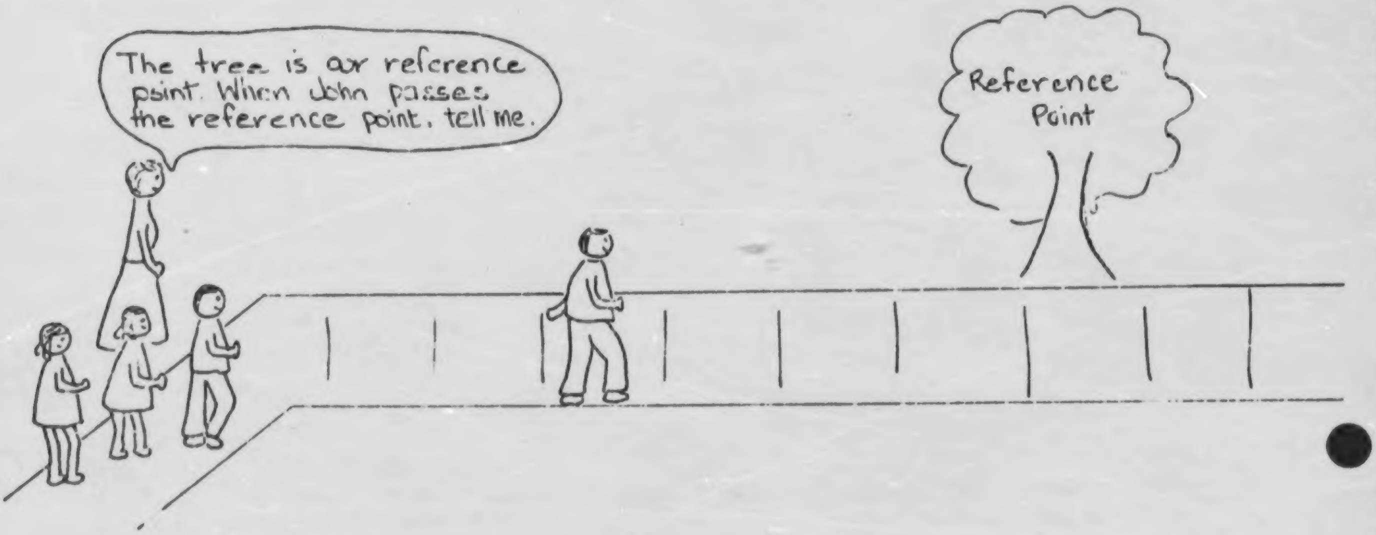
C

41

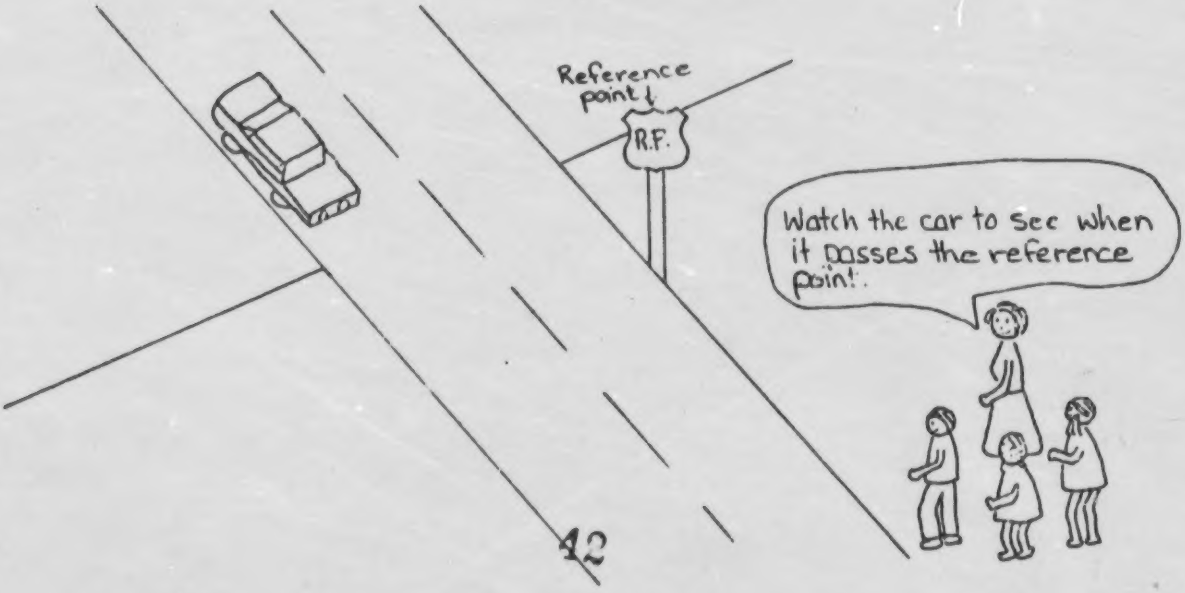
STEP THREE: The student must be able to judge the timing of an object (car) passing predesignated point.

PART a. Have students stand at a given point on a sidewalk. Select a reference point (i.e. sign, post, etc.) and ask the students to indicate when a single person has passed the selected reference point.

NOTE: A reference point can be any object (tree, sign, shadow, parked car, etc.) which marks the distance from you **that** a car must be in order for you to safely cross the street.

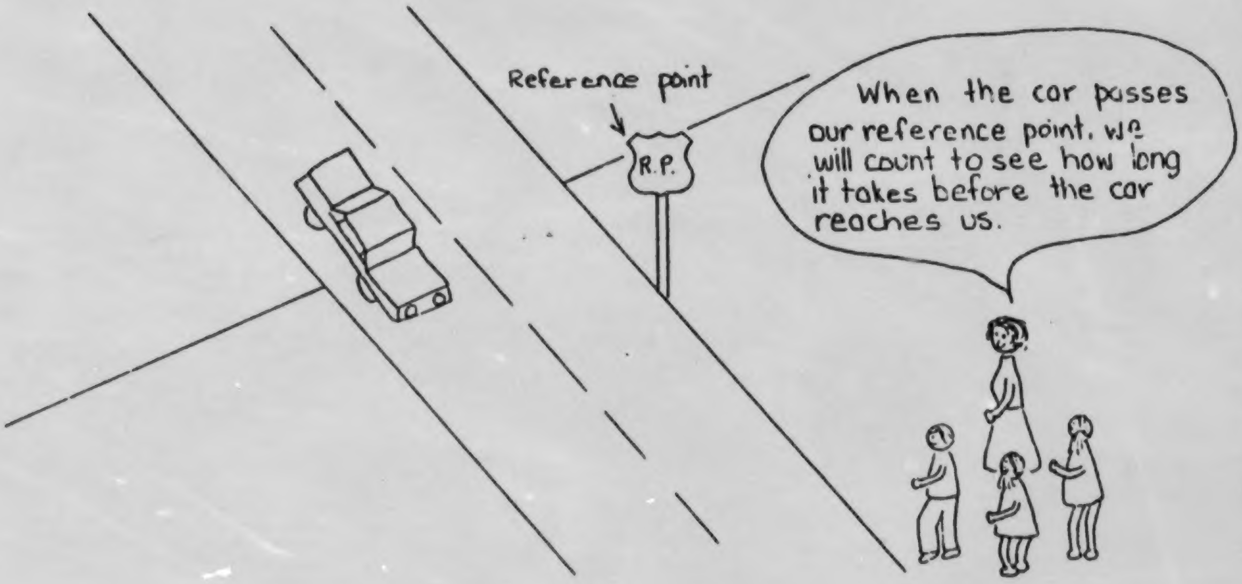

The tree is our reference point. When John passes the reference point, tell me.
Reference Point

When the children have the idea, proceed to choose a reference point in the street for cars to pass. Practice this until understood.

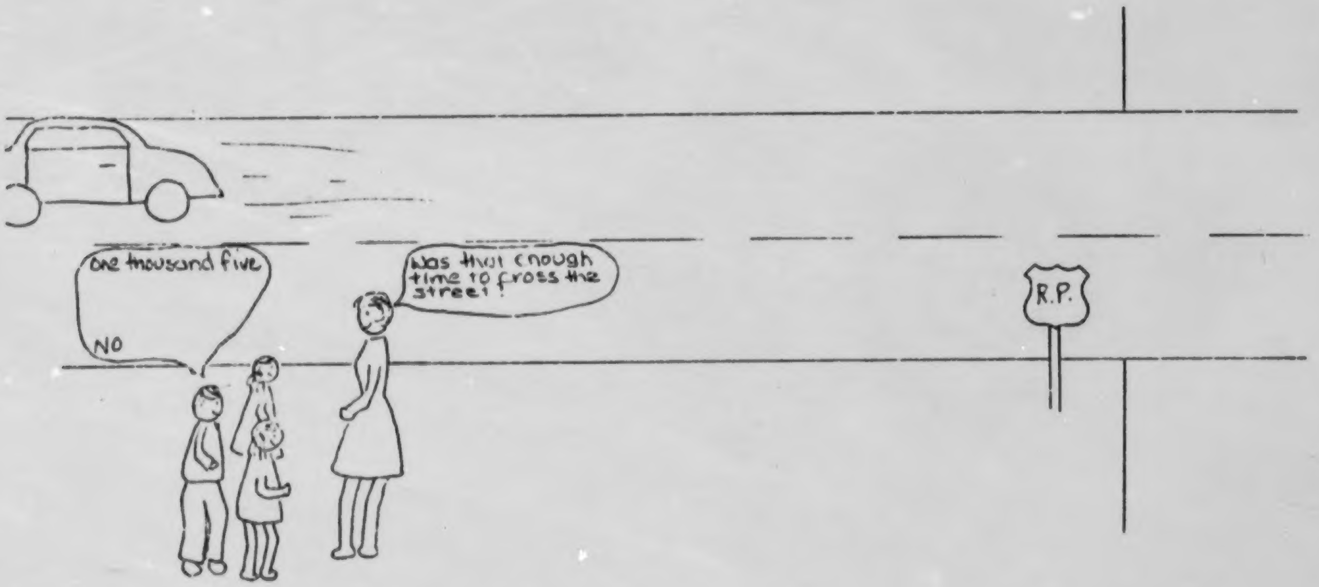

Reference point
R.F.
Watch the car to see when it passes the reference point.

C

PART b: Select or have students select a point. Explain that we now are going to count the distance from that point when a car passes it to where we are standing. (The distance should be lower than 12 seconds for sequential building.)

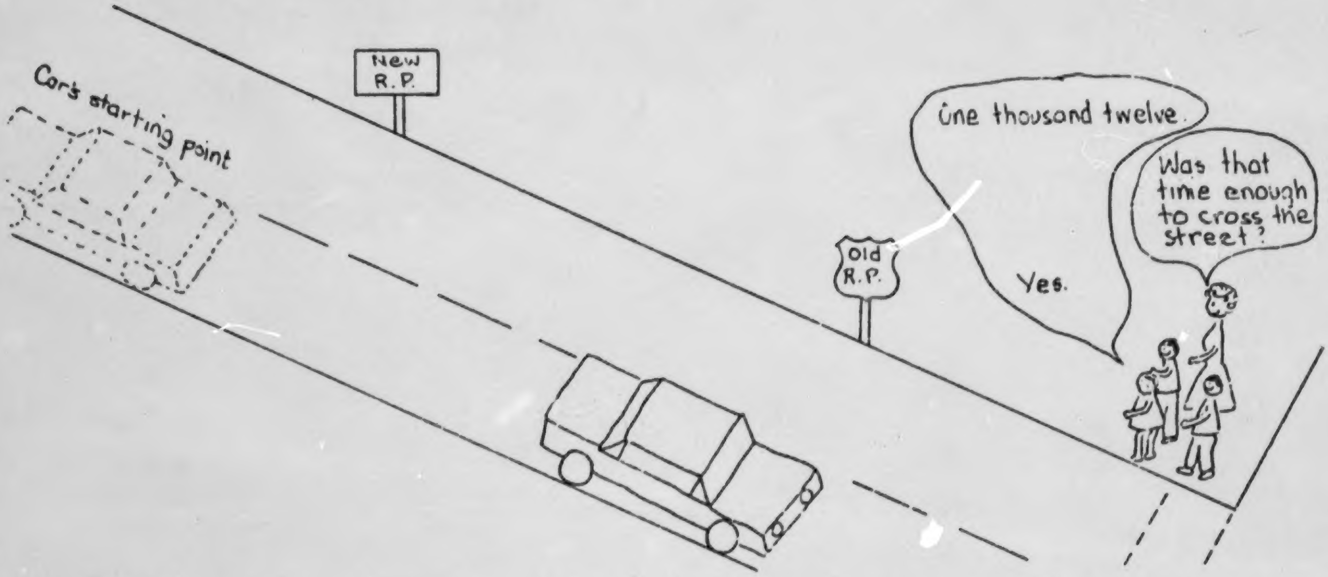

Reference point
R.P.
When the car passes our reference point, we will count to see how long it takes before the car reaches us.

After the distance is calculated, ask students if that was enough time to cross the street. The answer should be no.


One thousand five
NO
Was that enough time to cross the street?
R.P.

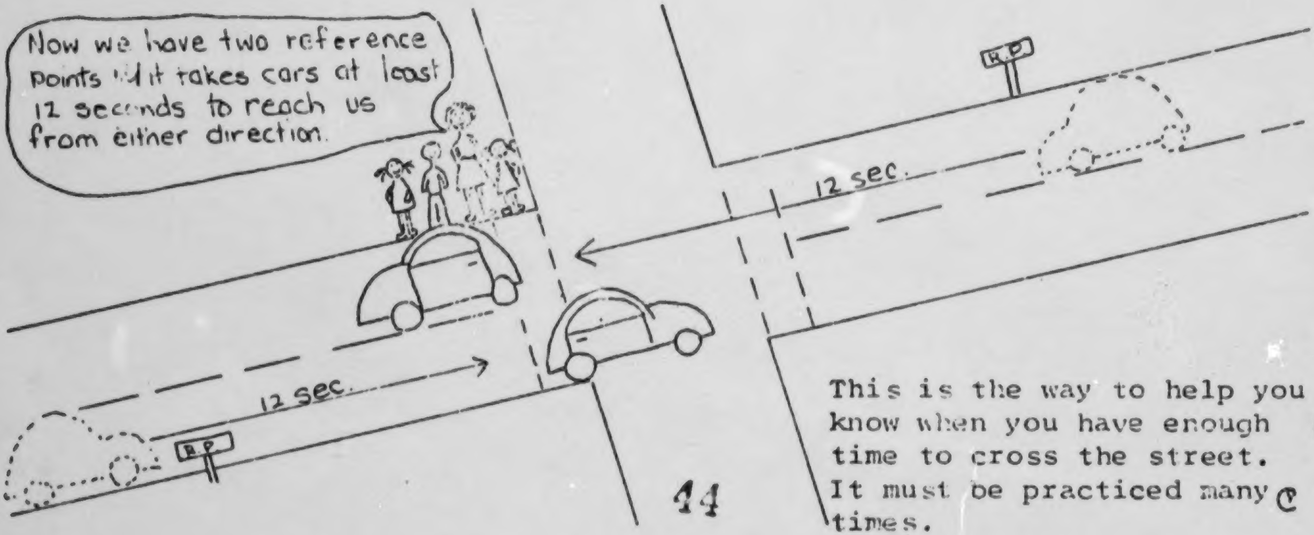
PART c: Now let's pick a reference point farther away to see if we can find one with the time we need. Follow this procedure and tell the students to find the reference point that allows enough time.

PART d: Repeat the same procedure in the opposite direction.


Car's starting point
New R.P.
Old R.P.
One thousand twelve.
Yes.
Was that time enough to cross the street?

STEP 4: We now have the reference points we need to tell us when we have enough time to cross safely. We now know that cars must be in back of these points to have enough time to cross the street without getting hit. We must remember these two reference points.

Let's practice with these reference points. Does everyone know what these points are? When I say "now" I want you to look both ways and tell me if you have enough time to cross. Practice until the students are proficient at the task.


Now we have two reference points and it takes cars at least 12 seconds to reach us from either direction.
R.P.
12 sec.
12 sec.
R.P.

This is the way to help you know when you have enough time to cross the street. It must be practiced many times.

OBJECTIVE: The students will be able to correctly answer 80% of the math problems dealing with space, time, and distance given here.

INTRODUCTION

The following math problems and activities are provided to express visually the unique relationship of space, time, and distance.

MASTERS FOR REPRODUCTION

J - Speed-Distance-Time Relationship Word Problems - Given specific information, the student finds solutions to problems dealing with:

- How many feet a car travels in a number of seconds.
- Determining which car has traveled the furthest distance.
- Determining average distance traveled.

K - Constructing Bar Graphs - Given specific information, the student constructs a bar graph and answers questions dealing with:

- Distance per second
- Distance per hour

L - Space, Time, and Distance Judgment Activity - Designed to be used as a model for group or individual manipulative activity. This activity demonstrates the space, time and distance relationship of various speeds of cars, using the principle of the lever with a string in the book.

M - Space, Time, Distance Activity - Designed to be used as a model for manipulative activity for a group of students or for the individual student. This activity is designed to demonstrate the speed, time, and distance relationship involving automobiles and pedestrians.

N - Relationship of Speed, Time, and Distance - Designed to be used as a model for a manipulative activity for group or individual students. This activity is concerned with demonstrating the space, time, and distance relationship of various speeds of cars using the principle of the pulley or wheel.

SPEED-DISTANCE-TIME RELATIONSHIP WORD PROBLEMS

Refer to the table to find solutions to the following problems.

SECONDS	10 MPH	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH
1	14.67	29.34	44	58.68	73.35	88	102.69
2	29.34	58.68	88	117.36	146.70	176	205.38
3	44.01	88.02	132	176.04	220.05	264	308.07
4	58.68	117.36	176	234.72	293.40	352	410.76
5	73.35	146.70	220	293.40	366.75	440	513.45
6	88.02	176.04	264	352.08	440.10	528	616.14
7	102.69	205.38	308	410.76	513.45	616	718.83
8	117.36	234.72	352	469.44	586.80	704	821.52
9	132.03	264.06	396	528.12	660.15	792	924.21
10	146.70	293.40	440	586.80	733.50	880	1,026.90

1. Mr. Jones is driving 30 miles per hour. In one second he travels 44 feet. How many feet will he travel in 10 seconds?

2. Mr. Baker can travel 88 feet in one second driving 60 miles per hour. How many seconds will it take him to travel 352 feet?

3. Mrs. Smith traveled one second going 10 miles per hour and Mrs. Elliott traveled one second going 30 miles per hour. Which one traveled the most distance and how much farther did she go?

4. Car A travels 10 miles per hour for 6 seconds and Car B travels 40 miles per hour for 2 seconds. Which car has traveled the most distance?

5. What is the average distance covered if a car traveled two seconds at 30 miles per hour, 5 seconds at 60 miles per hour, 6 seconds at 20 miles per hour, and one second at 70 miles per hour.

MASTER FOR REPRODUCTION J

SPEED-DISTANCE-TIME RELATIONSHIP WORD PROBLEMS

DIRECTIONS

Distribute handout. Have the children read the problems and use the table to solve them. Answers appear at the bottom of this page.

ANSWERS:

1. 444 feet
2. four seconds
3. Mrs. Elliott, 29.33 feet
4. Car B
5. 201.68 feet

K

CONSTRUCTING BAR GRAPHS

Given the information below, construct a bar graph. As you construct your bar graph, keep in mind the following questions:

1. What shall you label each axis?
2. What scale shall you use?
3. How many spaces will you need?
4. How will you mark the intersection of the vertical and horizontal axes?
5. How can you plan so that the bars are the same width and the spaces are the same distance apart?
6. How will you decide upon the size of the graph?

Miles Per Hour	One Second
70	102.69
60	88.00
50	73.35
40	58.68
30	44.00
20	29.34
10	14.67

Answer the following questions when you have completed your graph:

1. What does this graph show?
2. What is the title of the graph?
3. What do the numbers at the bottom indicate?
4. What do the numbers at the left show?
5. Which car travels the least distance in one second?
6. Which car travels the greatest distance in one second?
7. How many miles per hour can you travel in one second?
8. How much distance have you covered in one second traveling at 60 miles per hour?

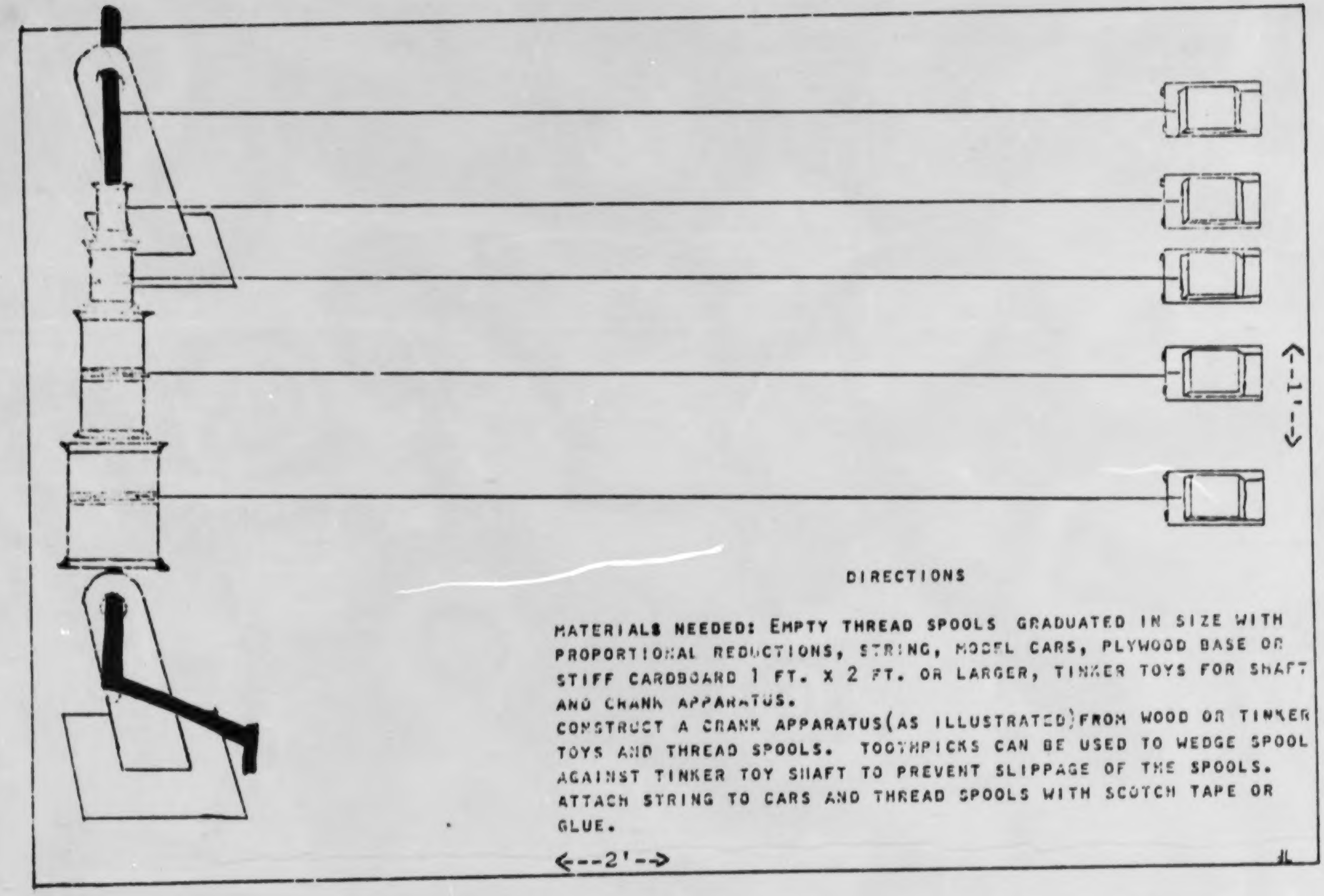
MASTER FOR REPRODUCTION K

CONSTRUCTING BAR GRAPHS

DIRECTIONS

Distribute student handout. With given information children are to construct a bar graph.

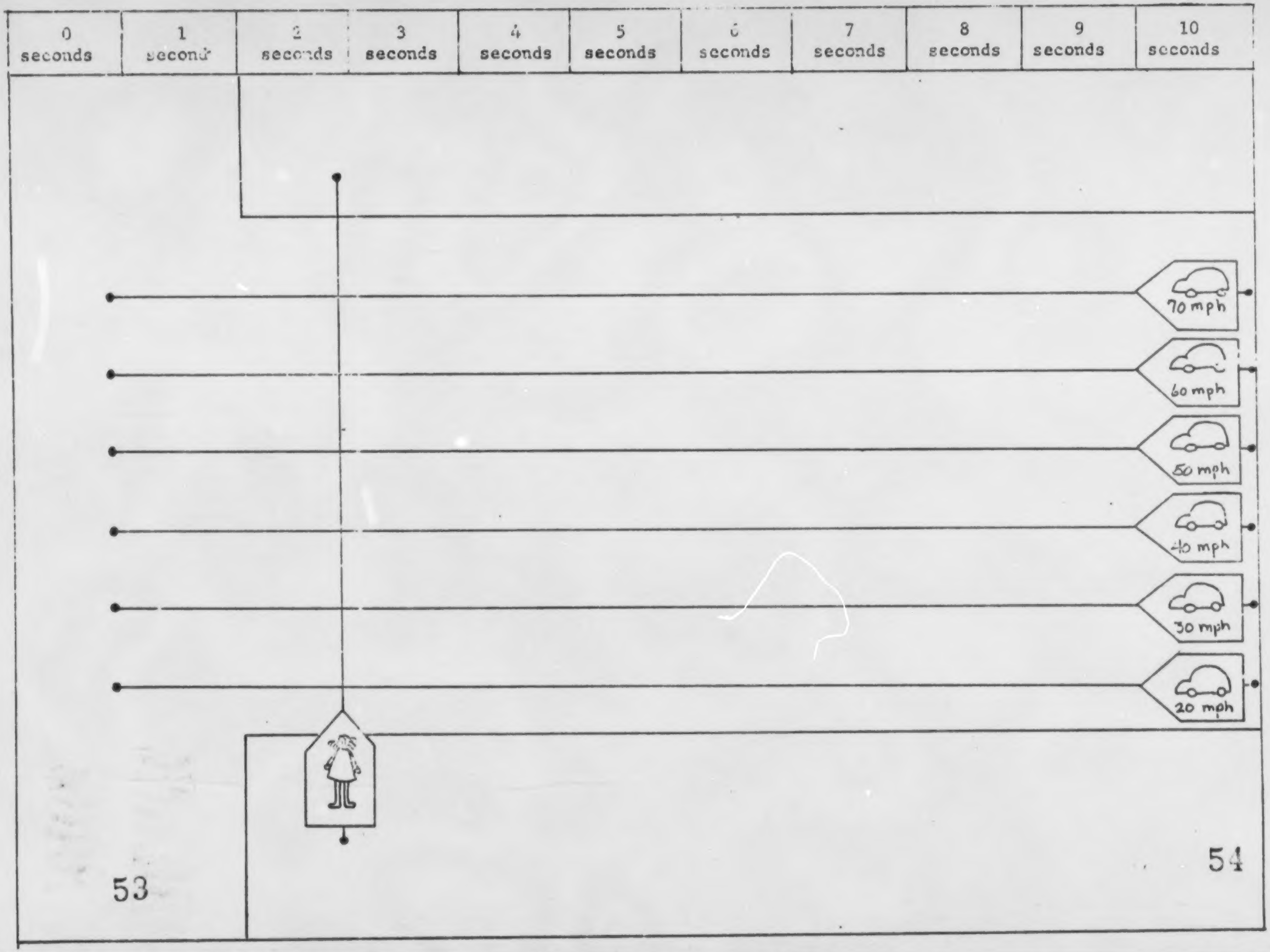
SPACE TIME AND DISTANCE JUDGEMENT ACTIVITY
(Model for Construction)



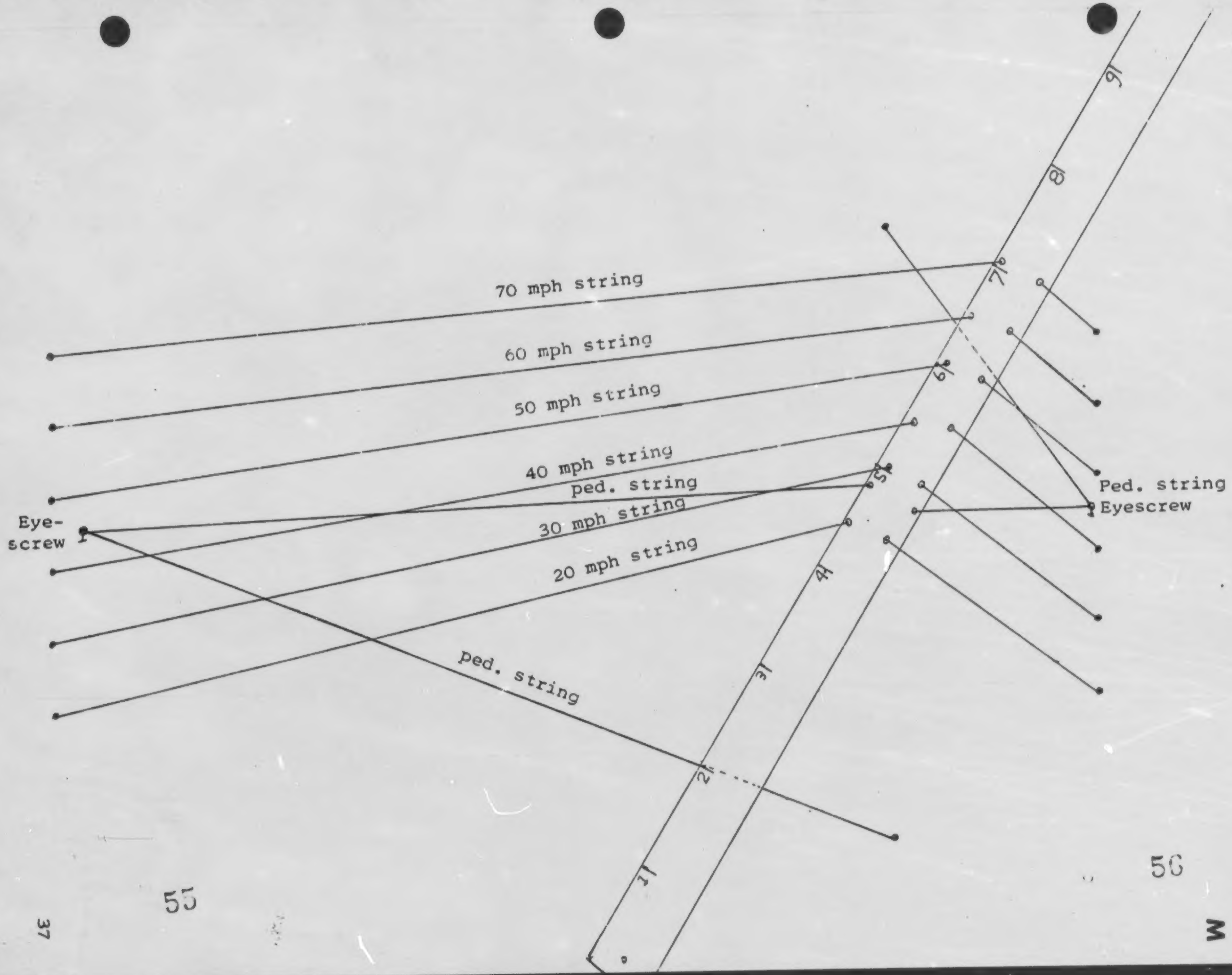
DIRECTIONS

MATERIALS NEEDED: EMPTY THREAD SPOOLS GRADUATED IN SIZE WITH PROPORTIONAL REDUCTIONS, STRING, MODEL CARS, PLYWOOD BASE OR STIFF CARDBOARD 1 FT. X 2 FT. OR LARGER, TINKER TOYS FOR SHAFT AND CRANK APPARATUS.

CONSTRUCT A CRANK APPARATUS(AS ILLUSTRATED)FROM WOOD OR TINKER TOYS AND THREAD SPOOLS. TOOTHPICKS CAN BE USED TO WEDGE SPOOL AGAINST TINKER TOY SHAFT TO PREVENT SLIPPAGE OF THE SPOOLS. ATTACH STRING TO CARS AND THREAD SPOOLS WITH SCOTCH TAPE OR GLUE.


0 seconds
1 second
2 seconds
3 seconds
4 seconds
5 seconds
6 seconds
7 seconds
8 seconds
9 seconds
10 seconds
70 mph
60 mph
50 mph
40 mph
30 mph
20 mph
53
54

M


70 mph string
60 mph string
50 mph string
40 mph string
ped. string
30 mph string
20 mph string
Eye-
screw
ped. string
Ped. string
Eyescrew
1
2
3
4
5
6
7
8
9

MASTER FOR REPRODUCTION M

SPACE, TIME, DISTANCE ACTIVITY

The following activity is designed to demonstrate the speed time, and distance relationships involving automobiles and pedestrians. The activity may be used as a demonstration by the teacher or an activity for independent student work.

Master for Reproduction J is designed to be used for exact duplication or as a guide for a larger size model. You may wish to have students experiment with the various orders and proportions and discover proportional relationships with a method or from a mathamatical approach.

Math problems can also be developed using the principle of the lever (in assembly) to decide where the strings should be connected to the lever on the back. Speeds of cars can be used to work out mathematical relationships, i.e, assign a specific speed to the car covering the greatest distance. Calculate other cars speeds by comparing distance they covered with distance covered by car with known speed, etc.

DIRECTIONS FOR CONSTRUCTION

On a piece of ¼" thick plywood or stiff cardboard, approximately 15" X 36" , draw or paint a street and intersection in similar proportion to the illustration. Drill or punch holes in a similar position as illustrated by dots at the ends of each string line. Use a yardstick or similar size stick to act as a lever on the back of the board. Attach lever as illustrated. Run string through each car path and attach to back lever as illustrated. Note: Pedestrian string must have additional length to attain proper relationship to car strings.

The pedestrian string must be placed under the car strings. Cut out paper wedges with cars and a pedestrian as depicted and glue them to the string with lever in left hand corner of board. Add a time scale in second intervals to ten at the top of the board.

How to work the model: Move the lever from left to right in second intevals. Cars will move in proportion to their designated speed. If the illustrated speeds are used, the cars should illustrate proportional relationship where the lever is moved on the time scale. Minor adjustment may have to be made on the lever to achieve this. If properly designed, the pedestrian should get run over by the two fastest cars.

Note: The accompanying sketch may be used as a pattern as it appears. However, the small size could complicate the smooth movements of the parts.

RELATIONSHIP OF SPEED, TIME AND DISTANCE

TO THE TEACHER

1. Cut out Part A. (Bar containing pictures of cars.)

2. **Fasten Part A to Part B allowing Part A** to move in a circular motion.

The purpose of this activity is to demonstrate the relationship of speed, time, and distance. This type of activity is necessary for the understanding of gap time assessment techniques.

Master graph may be used as transparency or mounted on cardboard.

Present the chart which follows and discuss the following:

Explain the title of the chart.

This chart pictures a type of numerical relationship between three kinds of information. The numbers on the left hand side at the lower portion represent miles per hour in tens, i.e.,10, 20, 30, etc. (An understanding of m.p.h. is not a skill required at fifth grade level for the understanding of the concept to be developed at this time.)

The data pictured in the form of a circle graph shows one-second intervals from one second to ten seconds.

The arm portion of the graph pictures seven individual cars identified alphabetically A through G.

Demonstrate the graph by placing the arm on the base line indicating miles per hour. Each car is there to represent distance covered by vehicles at different speeds. (Give explanation of the paths or lanes.) Explain also that each car is placed in a path or lane like you might find on a super highway; i.e., Car A is in a 10 mph lane, Car B is in a 20 mph lane, Car C is in a 30 mph lane, etc.

Move the arm one space at a time. While moving the arm, **have** the children respond orally, naming each one-second interval, i.e. one second, two seconds, three seconds, etc. To reinforce the one-second interval, select individual children to come to the graph and move the lever to specific markings; i.e., "Show where the lever would be at the end of three seconds."

N

ACTIVITY - Relationship of Speed, Time, and Distance

Master for Reproduction **N** is designed to reinforce the relationship of speed, time, and distance. The following are discussion activities to correspond with the graph.

Discuss:

1. What is the title of the chart?
2. What do the numbers at the lower left tell us?
3. What do the numbers at each interval tell us?
4. What do the paths each car is in represent?
5. Why is it necessary to have the cars move around the circle?

Move the arm to the one second interval line. Discuss:

1. Have all the cars traveled the same amount of time? (Yes)
2. How much time have they traveled? (One second)

Move the arm to the five-second interval line. Repeat questions.

Move the line of cars to the ten second interval. Repeat questions.

Move the arm to one second interval line. Instruct the children to color in the one second interval space at 10 mph, at 40 mph, and at 70 mph.

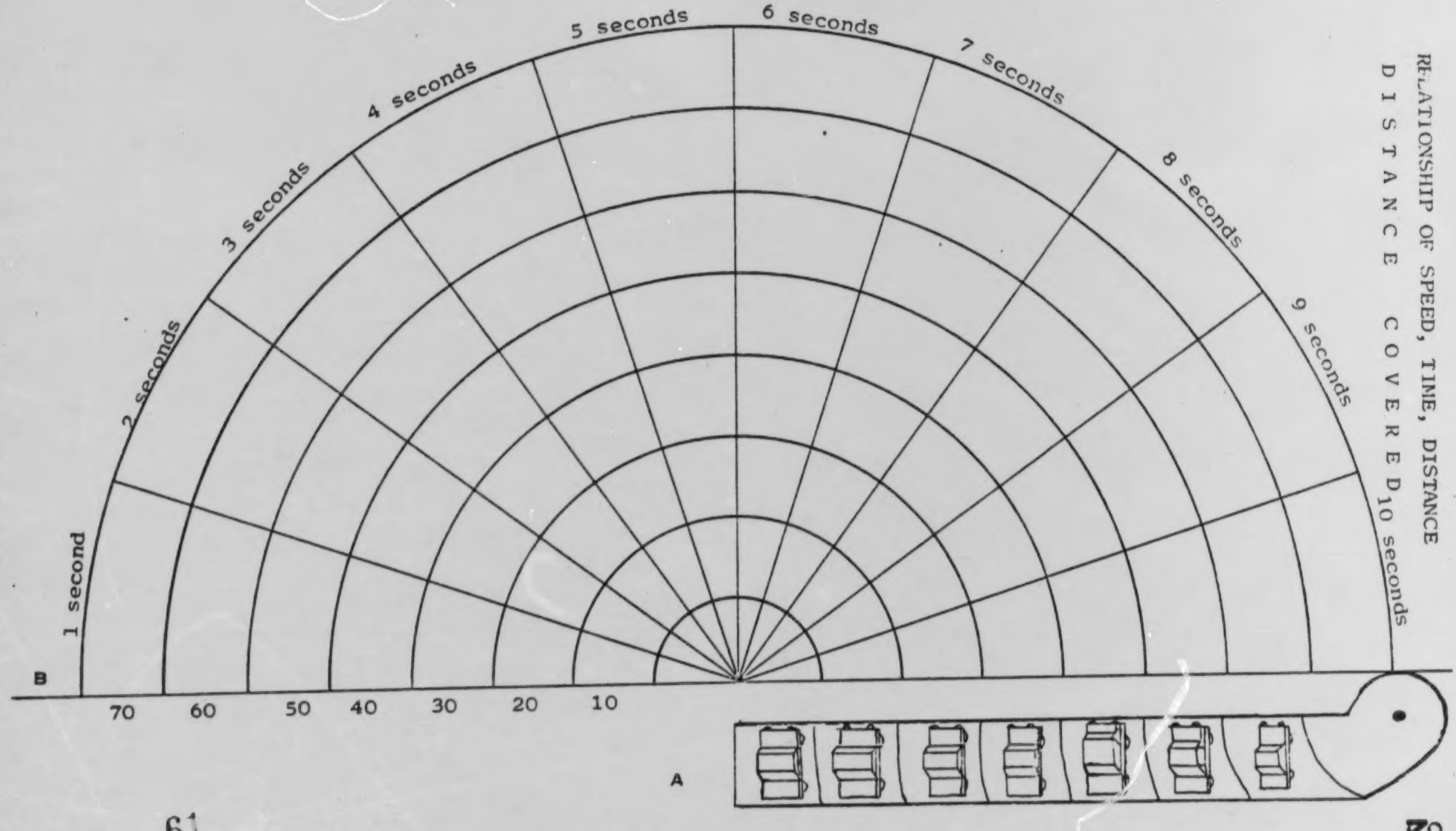
Discuss:

1. In which space did you have to color the most? (70 mph)
2. In which space did you color the least? (10 mph)
3. After one second, which car covered the most distance? (70 mph)
4. Which car covered the least distance? (10 mph)
5. Repeat instructions at the end of five second interval line and ten second interval line.

Children should be able to visualize that the car traveling at a higher rate of speed covers more distance than the cars traveling at a lower rate of speed.

RELATIONSHIP OF SPEED, TIME, DISTANCE

DISTANCE COVERED



1 second
2 seconds
3 seconds
4 seconds
5 seconds
6 seconds
7 seconds
8 seconds
9 seconds
10 seconds
B
70
60
50
40
30
20
10
A

To be used with Master for Reproduction N

MILES PER HOUR

SECONDS	10 MPH	20 MPH	30 MPH	40 MPH	50 MPH	60 MPH	70 MPH
1	14.67	29.34	44	58.68	73.35	88	102.69
2	29.34	58.68	88	117.36	146.70	176	205.38
3	44.01	88.02	132	176.04	220.05	264	308.07
4	58.68	117.36	176	234.72	293.40	352	410.76
5	73.35	146.70	220	293.40	366.75	440	513.45
6	88.02	176.04	264	352.08	440.10	528	616.14
7	102.69	205.38	308	410.76	513.45	616	718.83
8	117.36	234.72	352	469.44	586.80	704	821.52
9	132.02	264.06	396	528.12	660.15	792	924.21
10	146.70	293.40	440	586.80	733.50	880	1,026.90

LIGHT AND ITS USE IN SAFETY

INTRODUCTION

The study of light and reflective material has a direct bearing upon safety at night. Children must know the nature of light, reflection, etc. in order to have a better appreciation of the rules regarding walking after dark.

OBJECTIVE: Through a series of activities concerning light and color effects, the student will be able to name and explain those effects and their relationship to being seen at night.

CONCEPTS TO BE DEVELOPED:

1. Wearing white at night helps you to be seen better.
2. Sunlight is made up of all colors of the spectrum.
3. The amount of light reflected from an object determines its visibility.

TEACHER INFORMATION

WHY LIGHT UP AT NIGHT? Reflective material has the ability to bounce light back directly to its source, and to do so for a long distance. The person wearing retro-reflective material can be seen at night from almost twice as far away as the person who is not wearing retro-reflective material.

TYPES OF REFLECTION:

Definition - reflection means the bouncing back of a ray of light from a surface.

Everything around us reflects some light. Most objects are DIFFUSE reflectors. That is, light striking them is reflected in all directions. This is why they are hard to see at night. There is little light to be reflected; and what there is, is scattered in many directions and not back to the light source.

MIRROR reflection reflects light in only one direction, but unless the light source is directly in front of the mirror, this direction is away from the source.

RETRO-REFLECTIVE MATERIAL contains millions of tiny prisms or glass beads. Light striking one of these prisms or beads is focused within the structure and reflected directly back to the source.

In order for the student to understand the importance of color in the traffic environment, the student must understand what color is. When we say the signal light is red, we are saying the signal is reflecting that color. The red signal light is actually reflecting the surface of the red glass. Reflection is light hitting matter and bouncing away in straight lines.

1. MASTER FOR REPRODUCTION

   O-Light Makes Color

2. COLOR WHEEL - Have the class make a color wheel and experiment with mixing water colors to show how colors blend. A game may be played with several children as "It" and several others placing colored squares on their backs. The "It" team could then try to capture the color of the other team.

3. COLOR WHEEL SPIN - Make a pinwheel of the pure colors in the spectrum. Turn this very rapidly and note how it changes to white. Note the various colors in the classroom. How can we explain color?

   Place some pieces of colored cellophane or colored glass on the top plate of an overhead projector. Project these colors on the screen in a darkened room. Now turn the colored beam to an object of the same color (e.g., red to red). Now try projecting the red beam to a bright blue object. What conclusions can be drawn?

   A prism can break up a beam of light into a spectrum. It can also invert an image and serve as a mirror.

   Color is the way light appears to our eyes. White is the combination of all the colors in the spectrum. Black is the absence of light, thus the absence of color.

   The inability to distinguish color is called color blindness. Have students write a research report and relate the significance of color blindness to the traffic environment.

67

LIGHT MAKES COLOR O

EXPERIMENT

MATERIALS:

A prism or a gallon glass jar of water
A large sheet of white paper or cardboard
Colored crayons or paints
Squares of colored paper

We have discovered that the sun is responsible for the colors we see. Today we are going to capture that color and put it on paper. Have the prism or jar of water placed where the sun will shine through it. Place the large paper in such a position that the colors will show. Then the entire class will be able to see the colors made by the sun's rays.

Find the colored crayons that you think will make the same colors the sun makes. Try them on paper to be sure. Who wants to place the first color on this big paper? Can you capture the colors of the sun and put them on paper? When the colors are captured on the big paper we will each make the same colors on drawing paper. These are rainbow colors.

Refraction is light passing through matter and bending - - thus breaking into the spectrum.

Light will be bent or refracted when it passes through any substance whose surfaces are curved or not parallel. This would include a glass of water, a lens, or a prism.

MASTER FOR REPRODUCTION O

LIGHT MAKES COLOR EXPERIMENT

DIRECTIONS

With the materials and given procedure, ask the children to demonstrate how light makes color through refraction.

OBJECTIVE: Through a series of language art activities, the students will be able to decipher various traffic laws, rules, or procedures.

1. OUTLINING MAGAZINE ARTICLE - Have the children clip any article on traffic safety from the newspaper or magazine. Then have them express the concept of the article by summarizing it or outlining it to the class one at a time. Ask leading questions to the classmates to see if they had good comprehension skills and listened or to check to see if they got the point.

2. SCRAMBLED WORDS - Unscramble these jumbles to make words that have to do with traffic related jobs. Write each word in the correct order.

   ersenegin (Engineer)

   ncrgossi augrd (Crossing Guard)

   ubs vdriee (Bus Driver)

   lotrapnem (Patrolmen)

   tsafey (Safety)

3. MASTERS FOR REPRODUCTION

   P - Traffic Safety Chart

   Q - Write the Headlines

   R - Unscramble Sentence with Laws

   S - How Do You Read a Signal Light?

   T - What a Difference a Word Makes

4. CREATIVE WRITING ASSIGNMENT - Pedestrian Safety

The statement below supports a program of public education that will make people adopt intelligent practices for both walking and driving.

"PEDESTRIAN ACCIDENTS INVOLVE THE ENTIRE PUBLIC, AND PEDESTRIAN EDUCATION MUST THEREFORE TAKE PLACE OUTSIDE, AS WELL AS WITHIN, THE CLASSROOM."

Manual on Pedestrian Safety
American Automobile Association

Pretend you are writing a newspaper release to concern the public with pedestrian safety. The following suggestions will help you:

The first prerequisite for a release is that you have something newsworthy to write about. Then write the story as a simple, clearly worded newsworthy statement.

1. Indicate the source of the release at the top of the first page. Include a phone number for use if additional information is wanted.

2. Indicate, in the upper right-hand corner, any special release date. Otherwise, type "RELEASE UPON RECEIPT" or "IMMEDIATE RELEASE."

3. In the upper left-hand corner, give a title or headline, showing briefly and clearly what the release is about.

4. Leave plenty of space between title and beginning of the story, and keep side margins wide.

5. DOUBLE SPACE ALL COPY, and write on only one side of the page.

6. Lead off with a sentence or two telling briefly and directly what the story is about, and giving the main finding, conclusion or recommendation. Right at the start you have to win the editor's and later the reader's attention.

7. Introduce significant names--local names, if possible.

8. Early in the story, answer the following questions; WHAT? WHEN? WHERE? WHO? WHY? HOW?

9. Keep details for the latter part of the story, if you include them at all, so that, if cutting is necessary, it can be done from the end parts and with the least harm to your main story.

10. Always remember that the editor wants NEWS. Don't expect him to include preachments or "old stuff."

11. At the end of every page of multipage releases, write: "(more)."

12. Indicate end of the release by writing "(end)" or by the mark, "##."

RELEASE IDEAS-Cover new developments in the pedestrian safety program in your community. Significant local news subjects may be such as these:

1. the local pedestrian accident record
2. changes in the record
3. comments of prominent individuals
4. meetings to plan pedestrian safety measures
5. stories of persons assigned to duties within the program
6. installations of new signals
7. new information on pedestrian behavior
8. driver practices
9. traffic control systems
10. identification of intersections or other locations especially hazardous for pedestrians
11. awards given to the community for pedestrian safety

Ask national organizations which are active in promotion of pedestrian safety to suggest release ideas or to furnish newspaper mats. Such material is gladly supplied and can generally be used locally with little modification. Usually much time and thought have been devoted by national organizations on how best to achieve newsworthiness, variety, and educational effectiveness.

5. EDITORIAL WRITING-Write an editorial on pedestrian needs and correct behavior, and send it to the local newspaper or the school newspaper.

6. FEATURE STORY-Write a feature story for a local newspaper, magazine, or school publication. Possible topics are below.

SCHOOL SAFETY PATROLS IN ACTION

THE YOUTH TRAFFIC COURT

PEDESTRIAN VIOLATORS' SCHOOL

THE PEDESTRIAN---NUMBER ONE CITY FATALITY PROGRAM

PEDESTRIAN SAFETY TIPS

HOW PLAYGROUNDS SAVE YOUNG LIVES

P

TRAFFIC SAFETY CHART

Each of the words below are traffic related. Make a list of other traffic-related words with the letters of each word.

T - Truck
R -
A -
F -
F -
I -
C -

V -
E -
H -
I -
C -
L -
E -
S -

P -
E -
D -
E -
S -
T -
R -
I -
A -
N -

S -
C -
H -
O -
O -
L -

B -
U -
S -

MASTER FOR REPRODUCTION P

TRAFFIC SAFETY CHART

DIRECTIONS

Give children handout. Ask children to construct words from letters.

75

Q

WRITE THE HEADLINES

1. CHILD HURT WHILE RIDING BICYCLE. DID NOT HAVE
_______________ ON WHILE DRIVING AT NIGHT.

2. _______________ _________________ CLOTHES WOULD HAVE PREVENTED
NIGHT BICYCLE ACCIDENT.

3. PEDESTRIAN HURT BY BICYCLE DRIVER BECAUSE HE DID NOT STOP
AT ____________________.

4. BICYCLIST DID NOT PERMIT _______________ VEHICLE TO GO FIRST.

5. _______________ HANDS ON HANDLEBARS CAUSES BICYCLE ACCIDENT.

6. BICYCLIST CLAIMS HE DID NOT KNOW ________________ SIGNALS
WERE NECESSARY.

7. BOY AWARDED SAFETY PRIZE FOR ALWAYS _______________ HIS
BICYCLE ACROSS THE CROSSWALK.

8. MINI-BIKES AND GO CARTS ______________ PERMITTED ON PARKING LOTS.

9. MOTORCYCLIST UNDER ______________ YEARS OF AGE IS ILLEGAL.

10. RIDING _______________ TRAFFIC CAUSE OF SEVERE ACCIDENT.

MASTER FOR REPRODUCTION Q

WRITE THE HEADLINES

DIRECTIONS

Give children handout. Ask the children to fill in blanks with missing words in order to complete the headlines.

R

UNSCRAMBLE SENTENCE WITH LAWS

CHANGE THE ABSURDITY IN EACH SENTENCE WITH THE CORRECT ANSWER.

1. The policeman gave a ticket to the firetruck for passing a red light on the way to a fire.

   ____

   ____

2. The push-button device on Walk-Don't Walk sign did not change immediately, so Bill Nash became angry.

   ____

   ____

3. Betty Smith told her mother that she should not apply to be a school crossing guard because she is a woman.

   ____

   ____

4. An uncontrolled intersection means that everyone is running around without any control.

   ____

   ____

5. Sue Parker would not listen to the safety patrol boy when he told her not to cross because he is her brother.

   ____

   ____

MASTER FOR REPRODUCTION R

UNSCRAMBLE SENTENCE WITH LAWS

DIRECTIONS

Give children the handout. Have the children read the information and re-write it to make it correct.

HOW DO YOU READ A SIGNAL LIGHT?

FILL IN THE MISSING LETTERS AND THEN REWRITE THE MESSAGE ON THE LINES AT THE BOTTOM OF THIS PAPER.

The s-gn-l l-ght facing yo- in the di-ect-on you -ant to go is -he o-e to b- o-ey-ed.

The sign-l ligh- gi-es bo-h the p-des-tr-an and -ehicles the r-gh-t to m--e.

E-ergen-y ve-icles and --neral pr-ces-ions are le-ally a--owed to d--regard all -ign-l l-gh-s or s-o- s-gns.

A-y time --ere is a p-l-ceman d-r-ct--- tra--ic, o-ey h-m and not -h- si--al l-g-t or -alk ligh-.

1. ______________________________

____

2. ______________________________

____

3. ______________________________

____

4. ______________________________

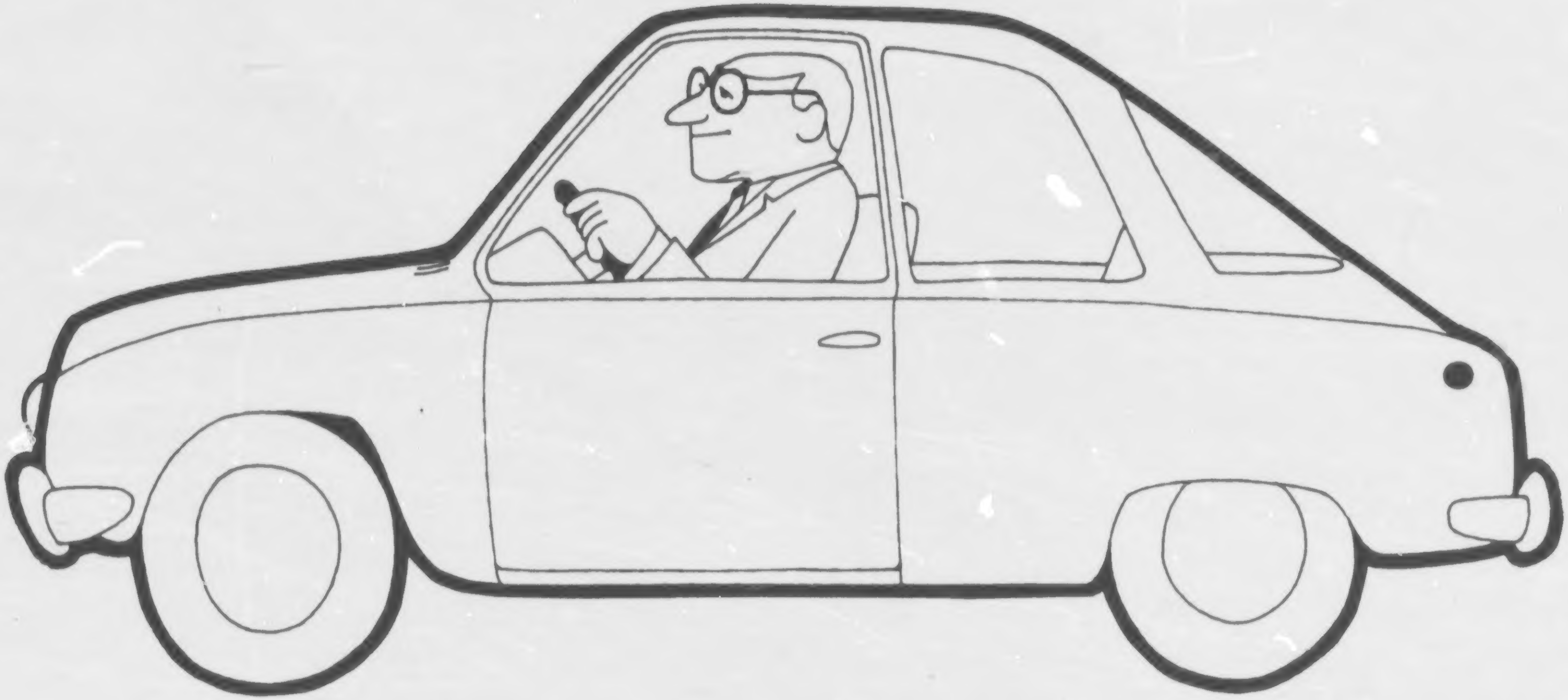
____

MASTER FOR REPRODUCTION S

HOW DO YOU READ A SIGNAL LIGHT?

DIRECTIONS

Give children handout. Have the children fill in the missing letter and re-write.



HEAD LAMP PETROL TANK TYRE BONNET WINDSCREEN BOOT SILENCER

HOOD WING FENDER

The above names are the British words for ten important parts of a car. Using a good desk dictionary, find the British meaning of each of these words. (Usually the dictionary will label this meaning Brit. or Chiefly Brit.) Cut and paste the British word next to the correct part of the car.

MASTER FOR REPRODUCTION T

WHAT A DIFFERENCE A WORD MAKES!

DIRECTIONS

Have students find the meaning of the British words for ten important car parts in a good desk dictionary. Ask them to cut and paste the correct word next to the proper part of the car.

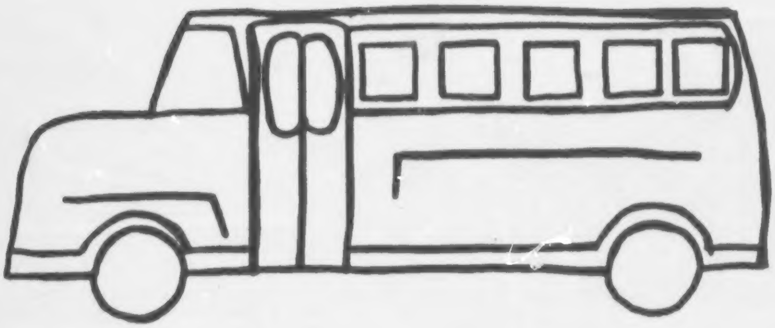
ANSWERS

AMERICAN TERM	BRITISH TERM
gas tank	petrol tank
trunk	boot
roof	hood
windshield	windscreen
hood	bonnet
fender	wing
headlight	headlamp
bumper	fender
tire	tyre
muffler	silencer

From: Contemporary English
Silver-Burdett

SCHOOL BUS SAFETY

ACTIVITIES



UNIT OBJECTIVES:

1. The students will be able to discriminate between the presented desired and undesired behavior and identify its effects upon the school bus driver, himself, and other passengers.

2. The students will apply rules for waiting, entering, riding, and exiting from the school bus.

OBJECTIVE: Having experienced the school bus learning activities, the student will be able to demonstrate his understanding of the procedures for waiting at the bus stop, entering, riding, and exiting from the school bus by stating, role-playing, or acting out these procedures at the discretion of the teacher.

PROCEDURES AT THE BUS STOP:

1. Know what time the bus will be ready to pick you up.
2. Be ready on time.
3. Plan to leave home at the same time each day.
4. Be at your bus stop at least five minutes before the bus. Avoid being at the bus stop too early.
5. If there are no sidewalks and you have to walk in the street, FACE TRAFFIC and walk in a single line.
6. Stay back away from the curb at least your arm length or more.
7. At the school bus stop, don't wait or play in the street.
8. Wait until your bus comes to a FULL STOP.

1. FACTUAL WRITING - DOES A SCHOOL BUS CUT DOWN ON THE NUMBER OF VEHICLES IN A GIVEN COMMUNITY? Ask students to research their information and come up with at least five facts to substantiate their position. They may use research from media or interview actual people involved in pupil or other transportation. This activity is effective as a debate. Another topic could be: DO SAFETY DEVICES BELONG ON SCHOOL BUSES? IF SO, WHAT KIND ARE THERE NOW? ARE THEY EFFECTIVE? WHAT KINDS WILL BE AVAILABLE IN THE FUTURE ?

2. TRANSPORTATION GROWTH AS IT HELPED THE UNITED STATES GROW - Ask students to research the sequence of discoveries leading up to the present types of vehicles and how they have aided the United States in its growth and development.

3. THE ROLE THAT PLEASURE VEHICLES HAVE IN THE UNITED STATES TODAY - Ask students to research the trend toward HOUSES ON WHEELS and to collect as much information as possible on those Americans who live on wheels.

4. THE ROLE OF SPORT VEHICLES IN THE UNITED STATES - PAST AND PRESENT . Ask students to do research on the vehicle as a type of sport. Ask them to provide background on the great automobile races of past and present through slides or multi-media expressions.

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INTRODUCTION: The following activities are designed to reinforce the Procedures for Entering the School Bus.

PROCEDURES FOR ENTERING THE SCHOOL BUS:

1. Wait for the school bus doors to be opened.
2. Keep one hand free to use the handrail.
3. Allow the smaller children to be in front of the line.
4. Leave space between each child in case of:

   abrupt halt by another child
   child picking up fallen object
   child in front missing a step

5. Take seat promptly.

1. DO IT YOURSELF MOVIE - Have the children make an original movie showing an average child who takes the school bus every day. Dialogue can be added later, but an outline of the movie should be done first on a story board. With permission, the movie may even start when the child gets up in the morning, eats breakfast, goes to meet the bus, enters the bus, behaves on the bus, exits and finally goes to his/her seat in school. An evaluation of the movie can be made by members of the class as to the negative and positive behavior aspects of the students that were filmed. Two students can be filmed going through the same routines. However, one should be a MODEL bus rider and the other the person who gets himself and everyone else in a dangerous situation.

2. INTERVIEWING THE SCHOOL BUS DRIVER - As an interesting sidelight show a film about the school bus driver or make a tape recorded interview about how the bus driver feels when driving the bus and how she/he reacts to different situations. An in-the-classroom RAP session with the school bus driver may be used as a follow-up to the lesson.

INTRODUCTION: The following activities are designed to reinforce the procedures for riding on the bus and are constructed to be integrated with other disciplinary areas.

PROCEDURES FOR RIDING ON THE BUS:

1. Stay quietly in your seat.
2. Save snacks and homework for later.
3. Put books or bundles where they can't slide or fall.
4. Keep your arms and legs out of the aisles.
5. Act as you would in a classroom.
6. Try not to carry big or heavy things on a bus.
7. Your head, hands ,and bundles are safest inside the bus.
8. Avoid: obstructing the path, rolling objects, spilling lunches and slippage, and throwing objects.
9. Remain seated while the bus is in motion.
10. Don't talk to the driver except in emergencies.
11. Don't talk at all when the bus is near a railroad crossing.

1. CAREERS THAT ARE AVAILABLE IN TRANSPORTATION - Ask students to research and report back to the class on this topic either orally or visually. Careers in related fields dealing with transportation can also be enumerated. The following are some suggestions for research assignments:

Bus Driver
Transportation Supervisor
Traffic Engineer
State Policeman
Helicopter Traffic Reporter
Driver Education Teacher
Drivers of all kinds of Vehicles
Transportation Union Officials
Coordinator of Traffic Safety for a State
Department of Transportation Careers
Secretary of Transportation in the President's Cabinet

Interviews with all or any of the above are appropriate. If a personal interview is not convenient, letter writing activities can be designed. A letter to the Secretary of Transportation may be in order.

2. TRANSPO EXHIBIT - Ask students to research exhibits depicting transportation past and present. Classmates can report to each other on the current findings. If a permanent exhibit is available, such as the Smithsonian Institute, a field trip will enhance the unit.

91

INTRODUCTION: The following activities are designed to reinforce the Procedures for Exiting from the Bus.
Note: Be sure that you use your county's specific procedure.

PROCEDURES FOR EXITING

Since procedures for exiting vary from county to county, please check the proper procedure for your school and county, and explain it to your students.

INFORMATION ON LOADING AND UNLOADING SCHOOL BUSES FOR THE STATE OF MARYLAND

Baltimore City - The school bus pulls over to the curb at established transit bus stops, and the children exit and cross the street as pedestrians. No flashing warning lights are used, and cars can pass the school bus when it is stopped.

Baltimore County - If it is necessary for a child to cross the street before entering or after exiting from the school bus, the child must make the crossing as a pedestrian. When the school bus stops to pick up children, it will flash its warning lights, and cars coming from both directions must stop.

Counties other than Baltimore County - The school bus flashes warning lights as children enter and exit from the school bus. When the children cross in front of the school bus, they should cross approximately five steps in front of the bus. If it is necessary for the child to cross the street, the driver will wait for the child.

* Emphasize to children that if they happen to drop any of their personal belongings near or under the bus, they should notify the driver and/or wait until the bus has gone before they attempt to retrieve that lost object.

MASTERS FOR REPRODUCTION

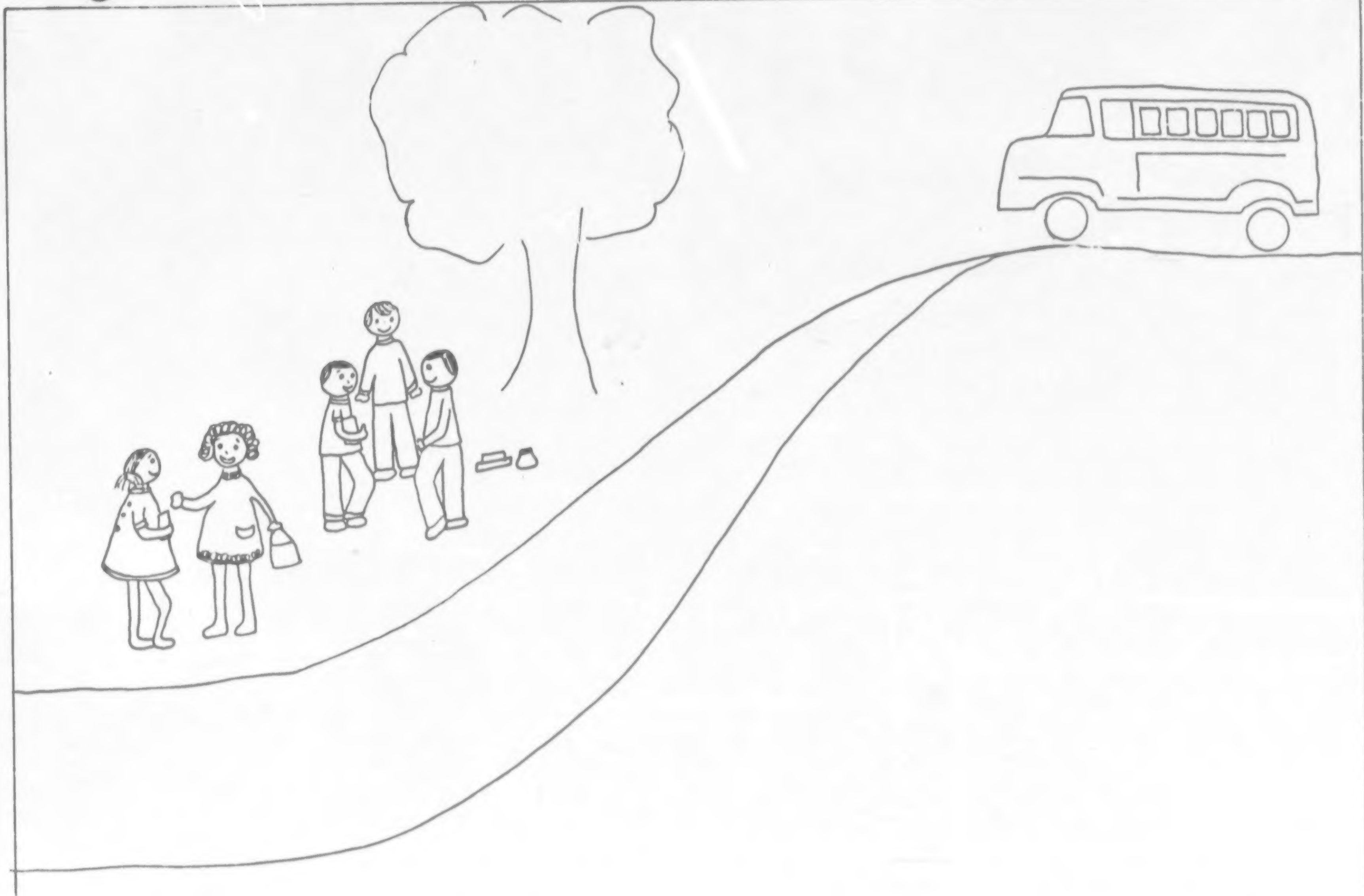
A - At the stop

B - Entering

C - Riding

D - Exiting

AT THE STOP



C

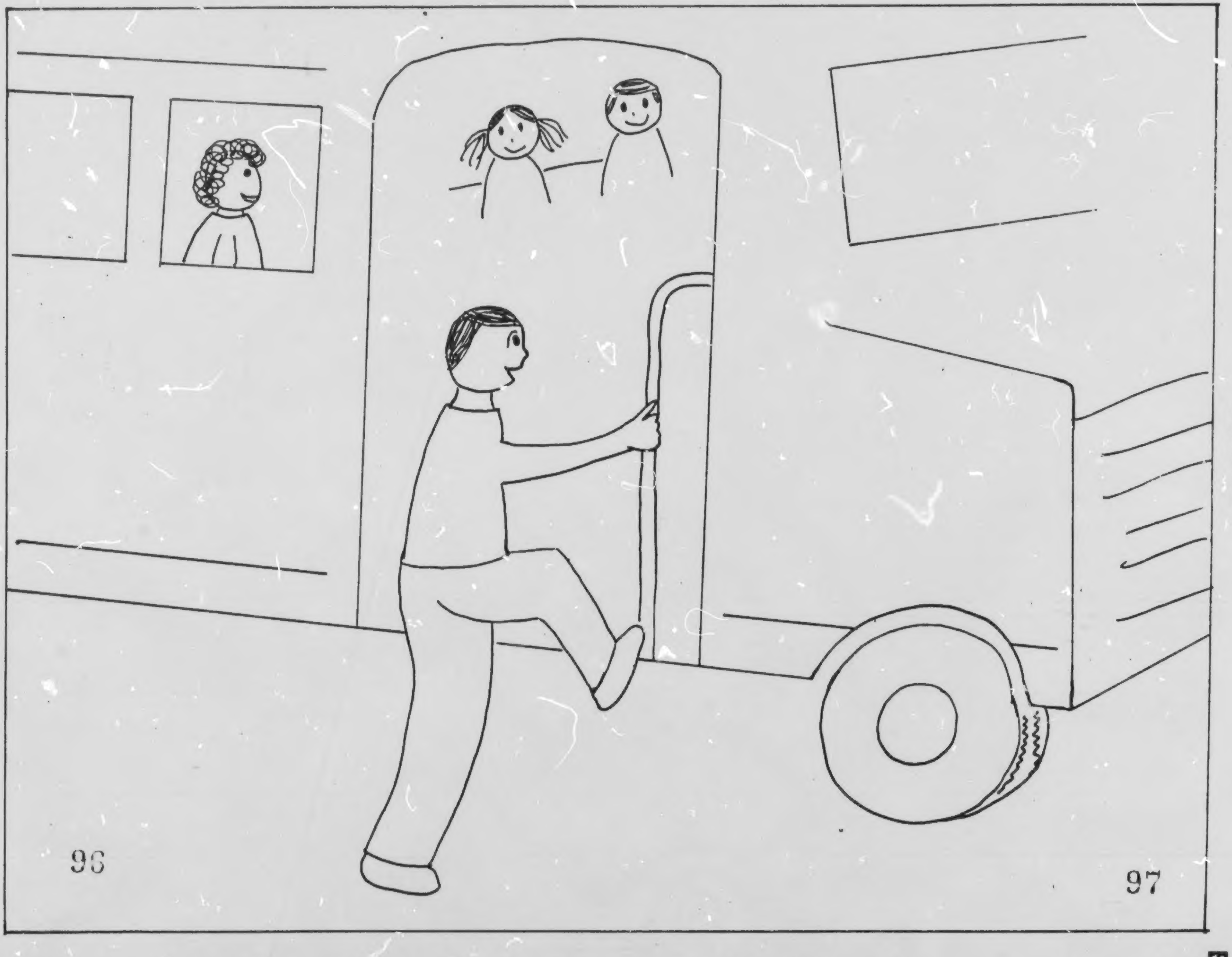
A

MASTER FOR REPRODUCTION A

AT THE STOP

DIRECTIONS

Use this on an overhead projector and discuss the correct procedure.



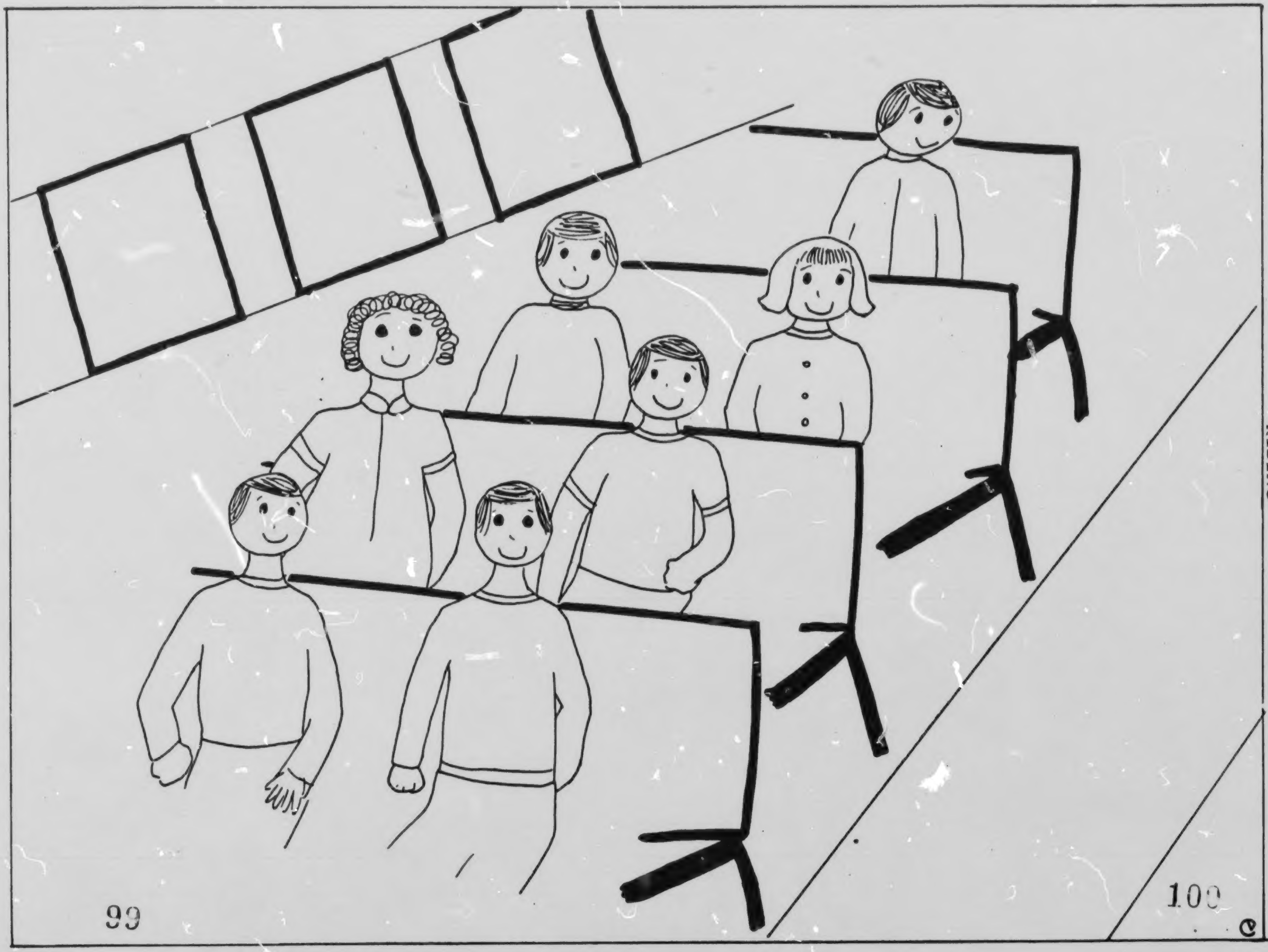
ENTERING

MASTER FOR REPRODUCTION B

ENTERING

DIRECTIONS

Use this on an overhead projector and discuss the correct procedure.



99

100

RIDING

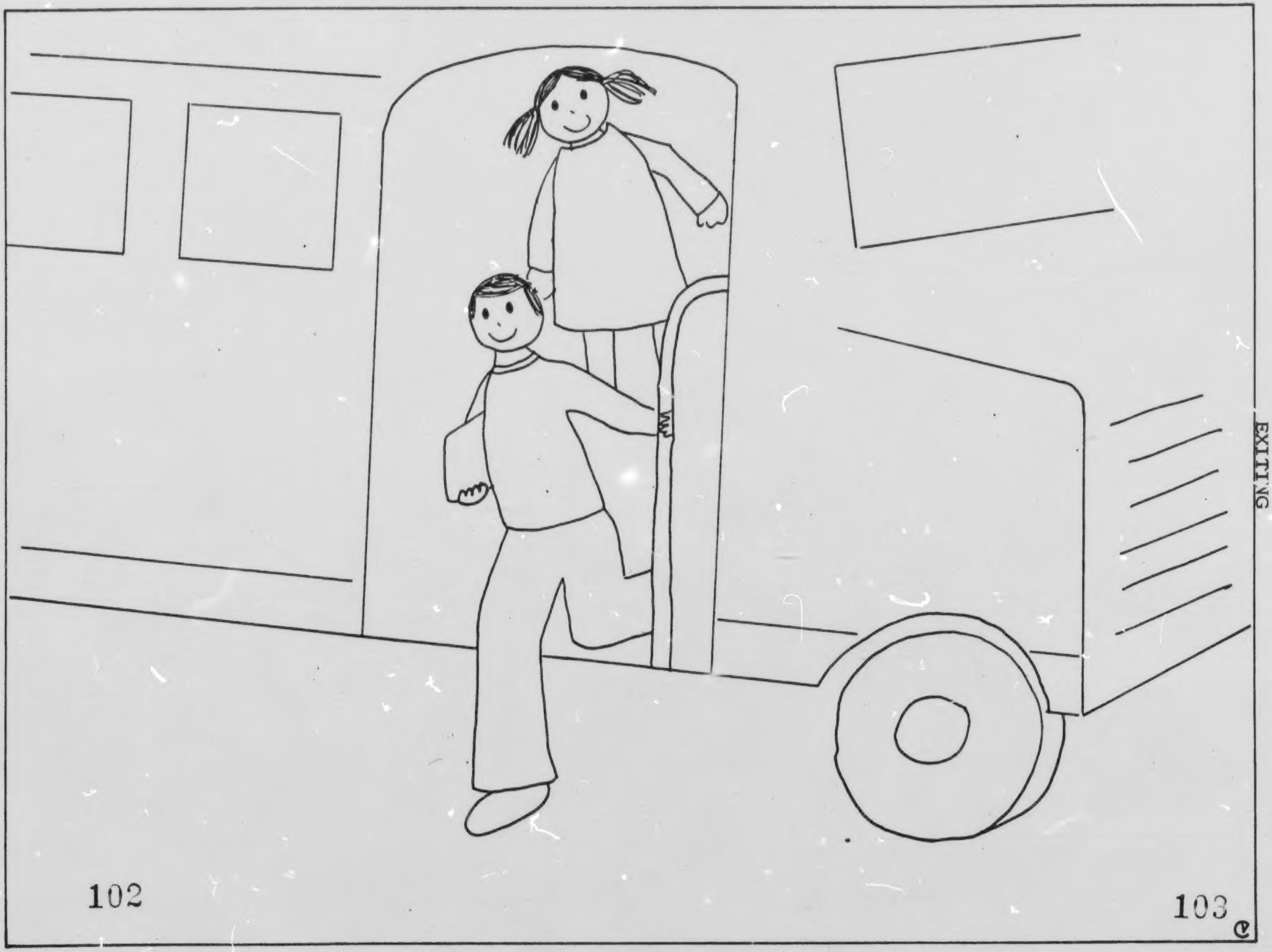
C

MASTER FOR REPRODUCTION C

RIDING

DIRECTIONS

Use this on an overhead projector and discuss the correct procedure.



102

103

EXITING

e

D

MASTER FOR REPRODUCTION D

EXITING

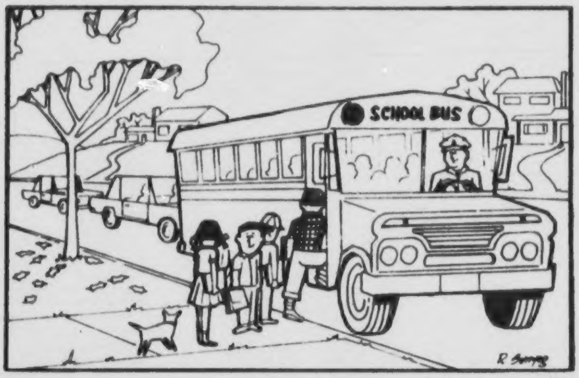
DIRECTIONS

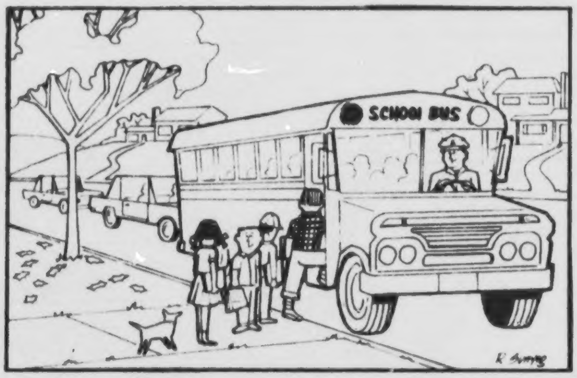
Use this on an overhead projector and discuss the correct procedure.

Perception Puzzler

It doesn't take a safety professional to realize that your eyes are the most valuable accident-preventers available—but only if they are put to use. Young pedestrians and bike drivers should be taught to keep a sharp lookout at all times for any change in the scene that might mean trouble.

To help them sharpen their visual ability, here is a "Perception Puzzler." The two pictures below look alike at first glance, but a careful second look should reveal seven subtle differences.

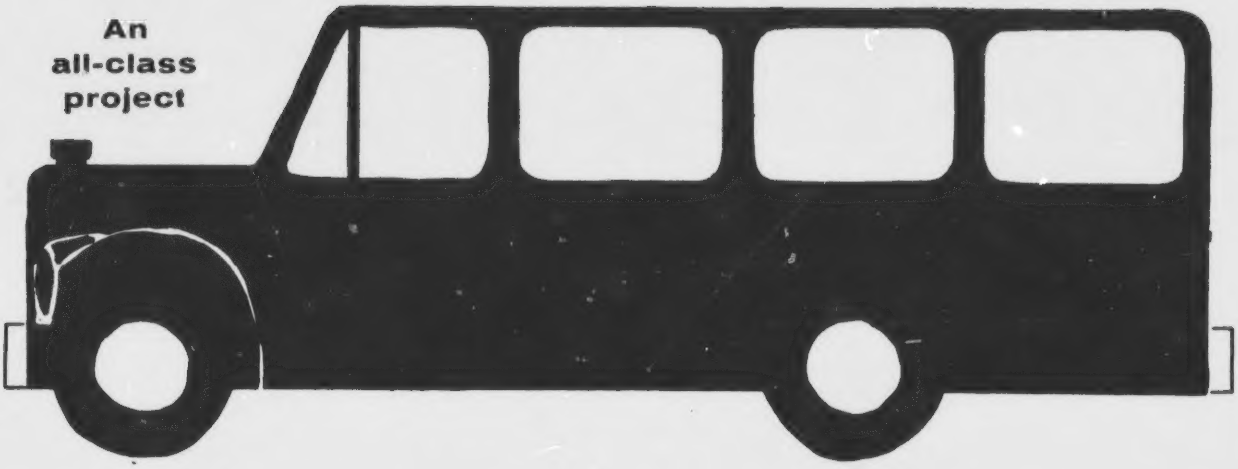




1. Window in house above right rear of bus widened in right cartoon. 2. Position of leaves to left of tree base changed. 3. Dog's right ear in different position. 4. Boy's crew cut trimmed differently. 5. Boy entering bus has right foot in different position. 6. Base of "L" in "School Bus" omitted. 7. Path to house at right of bus narrowed. Hard to find, weren't they? Remember, many hazards are just as difficult to spot.

SCHOOL SAFETY -
January - February 1969

An all-class project



SCHOOL BUS CUTOUT

Do you want an imaginative and effective way to teach a school bus safety lesson? Then ask your class to make this almost-life-size school bus out of colorful posterboard, add some chairs to form the bus interior, brief the children on the basic rules for safety and let them go on from there. They can show you how to board, where to sit, stow their books and where to stand. The possibilities for acting out safe bus riding practices are endless!

To make the bus, you'll need seven sheets of posterboard, paint or felt pens for decorating, glue, staples, construction paper for the bumpers and hubcaps, and tape that is at least one-inch wide. Begin by cutting one piece of the posterboard in half to form the bus hood.

Cut windows out of four boards. Cutting out a slanted windshield and projecting bumpers is optional. Then tape the pieces together vertically. If you allow enough flexibility when you tape, the bus can later be folded and stored like a Japanese screen.

Cut two circles, each one almost as wide as one section of the bus. Tape to the posterboard in the location shown. The wheels should extend below the bottom line of the bus body so they hide the standing bus supports. Paste on hubcaps of construction paper.

Bus supports are made from two identical isosceles triangles cut from the posterboard. Each triangle should be about two-thirds the height of the bus (measuring from the bottom of the wheels), with a base about one-half the length of the triangle side. Fold the triangle in half vertically (you may have to score the board so it will fold properly). Attach one side of the folded half to the back of the bus behind the wheel. Bend the other half perpendicular to the bus body.

Add the fenders, lights, school name and any other decorations with brightly colored paint. Line up desk chairs in pairs to form the bus interior. The pupil designated as the driver should sit alone. Then, the children should learn and practice the **following** basic rules for riding the school bus safely.

1. Leave home early enough to reach your bus stop on time. Plan to be there no more than four or five minutes before the bus is scheduled to arrive.
2. As you wait for the bus, stay back from the road's edge so you won't accidentally slip and fall onto the highway, or distract passing motorists.
3. Stay back and wait for the bus to come to a complete stop. Then board the bus without delay, holding the handrail as you go up the steps. Take a seat quietly and stay seated until the bus comes to a *full* stop.
4. If you must stand as you ride to school, face the side or the front of the bus, and hold onto the backs of two seats, gripping one with each hand.
5. Follow the instructions of your driver and the school bus patrol (if you have one) promptly.
6. Keep books and packages on your lap or place them on the floor *under* your seat. Never put anything in the aisles.
7. Remember, good conduct is the first rule of safe behavior. There's nothing wrong with quiet conversation, but loud talking and any kind of active play are out. All talking should stop when you approach a railroad crossing, so the driver can listen for trains.
8. Don't do your homework or eat your breakfast on the bus. Think what might happen if the bus went over a bump, or stopped suddenly. You might choke on a mouthful of food or jab yourself.
9. Never put your head, elbows, arms — or anything else — out the windows. The first-aid kit, flares, fuses and the emergency doors are for emergency use only.
10. Get off the bus quickly and quietly without crowding, shoving or pushing. Don't linger around bus loading zones.

BICYCLE SAFETY ACTIVITIES

UNIT OBJECTIVES:

Through a sequence of learning activities using the bicycle as the focal point, the student will acquire a basic understanding of the highway system and its inherent laws.

SKILLS YOU MUST HAVE TO BE A GOOD BIKE DRIVER

1. Getting on and starting up.
2. Balancing.
3. Keeping a good position.
4. Pedaling and ankling.
5. Changing balance to turn, avoiding hazards.
6. Braking to control speed.
7. Stopping when you expect to cope with an emergency.
8. Getting off your bike.

Two important things to remember:

1. Proper fit.
2. Safety check.

SAFE BICYCLE PRACTICES

1. Safety check the vehicle.
2. Choose a safe route.
3. Drive the route mentally before starting.
4. Leave in time to reach the destination safely.
5. Know how well you can drive.
6. Get ready to drive before you start.
7. Keep safe following distances.
8. Keep to the right.
9. Look ahead--stay ready for action.

BICYCLE SAFETY CHECK

1. Be sure your bike is in a safe condition for driving.
2. Be sure to have in working order a light in front, a reflector in back, and a horn or bell on your bike.
3. Keep to the right. Drive with the traffic, never against it.
4. Obey all signs, signals, and pavement markings.
5. Always use hand signals for right turn, left turn, and stop.
6. Make each turn with caution.
7. Always give the right-of-way to pedestrians.
8. Cross intersections safely.
9. Drive your bike as a traffic vehicle when you drive in a traffic area.
10. Take special precautions when you drive at night.

____
Child's Signature

____
Parent's Signature

PARENTAL GUIDE FOR PURCHASING A BICYCLE

1. Is my child old enough to understand his responsibility in traffic?
2. Will he keep a bike in good shape?
3. Will he practice a safe bicycle driver's code?
4. Will I see that my child gets proper instruction in bicycle safety before he is permitted to drive in traffic?
5. Do we live in a safe area, not heavily congested with traffic?
6. Are there safe places to ride a bike near home?
7. Does the bicycle fit the child? (Leg, thigh, and heel of the foot on the low pedal should form a straight line.)
8. Is the saddle parallel to the ground?
9. Are the handlebar grips at right angles to the handlebar stem?

NOTE: Some bicycles can be adjusted somewhat to the child.

Additional resource material can be obtained from: American Automobile Association, 1712 G Street, N. W., Washington, D. C.20006

BICYCLE BASIC CONCEPT REVIEW

1. A bicycle is a vehicle.
2. A good driver must consider: the size of the bike, the type of bike, where he rides, and his skill.
3. Since the bicycle is a vehicle, the driver must know and understand the laws and rules of the road and know local regulations.
4. For a bicyclist to be safe, he should know the right size of bicycle for him, the right seat position, handlebar position, and body position.
5. There is equipment on a bicycle that is required for safety, and there is optional equipment for decorative purposes.
6. Keeping your bicycle in good working condition with all parts functioning properly is a must for a good bicycle driver.
7. A bicyclist should be able to recognize signs and signals by their shape and color.
8. A bicyclist must be familiar with the new signs.
9. A bicyclist must be able to recognize signs and signals for railroad crossings.
10. A bicyclist must be able to identify the meaning of street markings.
11. The bicyclist must know the rules of the road if the bicycle is to be used as a vehicle in the street.

MASTERS FOR REPRODUCTION

A - Bicycle Rules

B - Maryland Bicycle Law

C - Language Arts - Advertising

D - The History of the Bicycle

E - Bicycle Activities

F - The Well-Equipped Bicycle

BICYCLE RULES

The following is a list of bicycle rules to protect bicycle drivers in our state. In the blank space after each rule, write why you think it is necessary to enforce it. What might happen if we did not have these rules?

ON A TWO-LANE, TWO-WAY STREET OR HIGHWAY never cross the center line to pass unless you first make certain you have plenty of room to do so safely.

ON A MULTI-LANE STREET OR HIGHWAY WHERE THERE IS MORE THAN ONE TRAFFIC LANE IN EACH DIRECTION never weave back and forth from one lane to another. This is a traffic law violation. When it is necessary to change lanes, always give a turn signal.

ONE WAY STREETS are posted with signs. The arrow shows you in which direction traffic is moving. These signs also apply to bicycles, and you must never ride against the traffic.

BICYCLES are not allowed on expressways. You will see signs at entrance ramps which tell you this.

MASTER FOR REPRODUCTION A

BICYCLE RULES

DIRECTIONS

Give children handout. Ask the children to write their reaction to the law.

MARYLAND BICYCLE LAW #(11-1203b) states:

"NO BICYCLE SHALL BE USED TO CARRY MORE PERSONS AT ONE TIME THAN THE NUMBER FOR WHICH IT IS DESIGNED OR EQUIPPED."

If you had to design a bicycle to carry more than one person at one time, what would it look like? How would you equip it? Illustrate your design below. Describe the equipment it would have and purposes it would serve. Be sure it complies with the above law.

MASTER FOR REPRODUCTION B

MARYLAND BICYCLE LAW

DIRECTIONS

After reading the law, ask children to design a bicycle of their own that conforms to the law.

C

LANGUAGE ARTS - Advertising

Now that you have designed your original bicycle (Master for Reproduction B), how would you go about convincing people to buy it? Give three examples below of ways you would advertise or sell your unique product. You can use any advertising media you can think of. Some examples may be:

> newspaper, t.v., radio, pamphlets, billboards, door to door selling, ads for buses, airplanes, railroad stations, taxis, bus terminals, etc.

MASTER FOR REPRODUCTION C

LANGUAGE ARTS

DIRECTIONS

Give children handout. Ask children to compose ways of advertising designed bicycle.

Research The History of the Bicycle

QUESTIONS

1. Where have descriptions of the ancestor of today's bicycle been found?

2. When was the first bicycle developed?

3. Name one individual who has been the most influential in designing and developing the bicycle?

4. Define the words below:

    hobby horse
    velocipede boneshaker

5. Illustrate three examples of bicycles from the past.

6. Why were bicycles especially popular during the early 1900's?

7. Is the reason for today's popularity for bicycles the same as it was in the early 1900's?

8. What is the highest recorded speed a bicycle can travel per hour?

9. How important is the bicycle to you personally?

10. Approximately how many bicycle drivers are there in the United States today? _______ In the world? _________

11. Write a brief paragraph on any information concerning the history of the bicycle that you feel will add interest to your research report.

MASTER FOR REPRODUCTION D

RESEARCH - HISTORY OF BICYCLE

DIRECTIONS

Give children handout. Ask them to research and discuss the listed information.

Answers will vary.

BICYCLE ACTIVITIES

BICYCLE MAP ROUTE

Draw a map to scale of the play areas in your neighborhood where children may ride their bicycles. Be sure to include the bicycle route you would take from your home to school.

BIKE PATH ROUTE

Bike routes are gaining popularity every day. Design and illustrate a Bike Path Route that bicycle drivers could use if they wanted to go from your neighborhood to the nearest shopping or business center. Local street maps will be helpful to you.

LETTERS TO ELECTED OFFICIALS

Write letters to your Congressman, State Senators, and State Legislators and ask them about what is being done in your area to construct bicycle paths for both pleasure riders and for those who wish to ride to work.

RESOURCE PERSONNEL

Invite a member of the Maryland Bicycle Association to come to your class and give a presentation. Be sure to prepare questions in advance. A good technique for writing interviewing questions are the use of: Who, What, When, Where, Why and How.

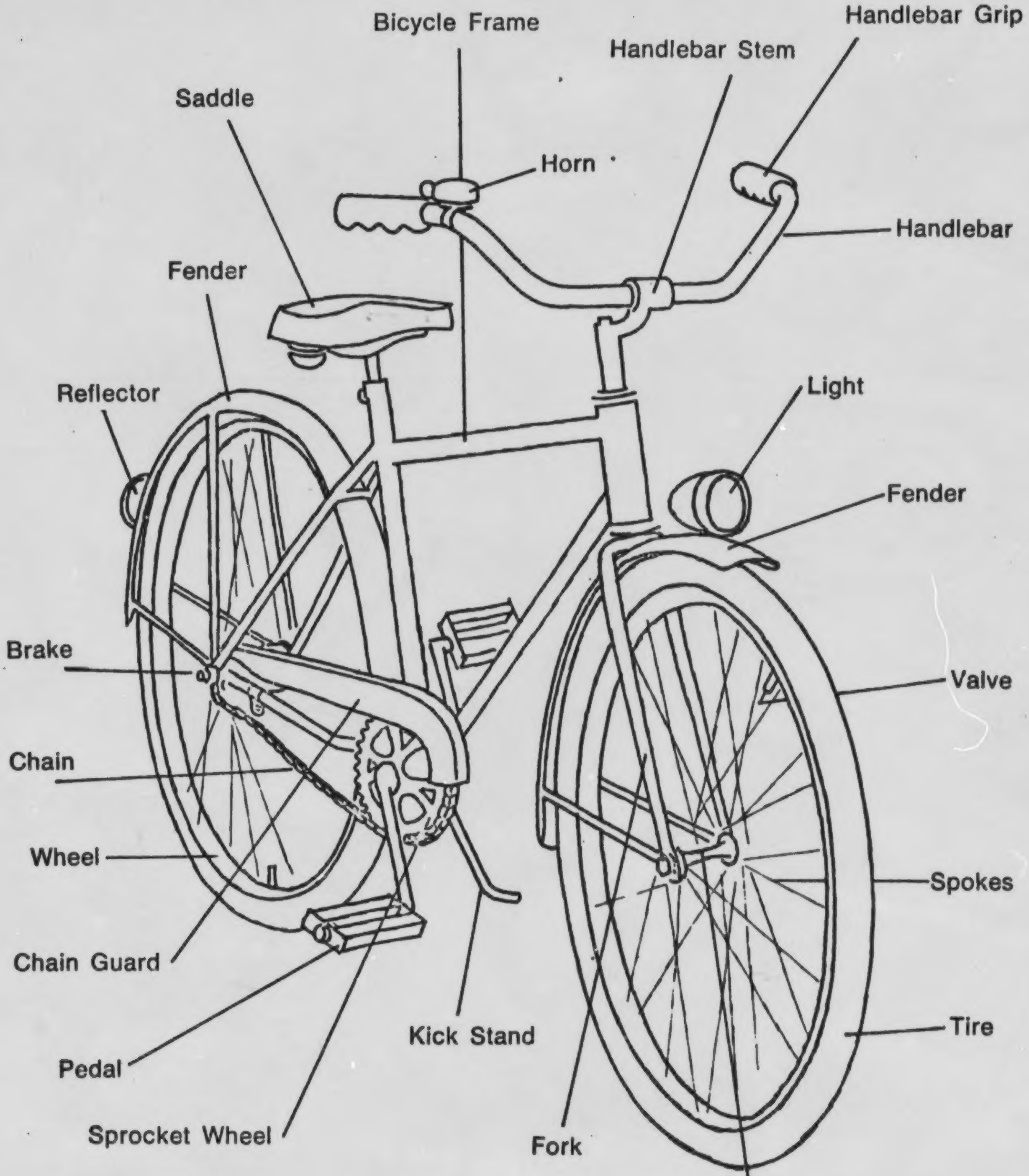
DESIGN A BICYCLE OF YOUR DREAM

MASTER FOR REPRODUCTION E

BICYCLE ACTIVITIES

DIRECTIONS

Give children handout. Have them select additional topic (s) for further study.


Bicycle Frame
Handlebar Grip
Handlebar Stem
Saddle
Horn
Handlebar
Fender
Reflector
Light
Fender
Brake
Valve
Chain
Wheel
Spokes
Chain Guard
Tire
Kick Stand
Pedal
Sprocket Wheel
Fork
Front Wheel Hub

MASTER FOR REPRODUCTION F

THE WELL EQUIPPED BICYCLE

DIRECTIONS

Give students handout sheet for discussion purposes.

AUTO PASSENGER SAFETY ACTIVITIES

UNIT OBJECTIVES:

After experiencing several of the following activities (to be determined by the teacher), the student will be able to:

1. Compare and contrast the advantages and disadvantages of using seat belts through a series of activities concerning seat belt usage.
2. Demonstrate through self initiated activities the recommended procedures for entering and exiting from an automobile.
3. Illustrate by demonstration the effects of G Forces.
4. Compute miles per gallon of gasoline in specific situations.
5. Plan and chart a selected route to a given destination using a state road map.

PROCEDURES FOR ENTERING A CAR - (Review)

1. Open the car door on the curb side.
2. Be sure the door is closed securely.
3. Lock the door.
4. Fasten the seat belt and adjust it securely.

Using the procedures listed above, have the students create hypothetical situations in which one or more of the procedures is violated. Upon completion the class may conduct a Mock Court with judge and jury to determine which rule was violated. In addition, students may consult the Motor Vehicle Laws of Maryland, to determine if there have been any vehicle violations involved.

If the students are not familiar with the Procedures for Entering a Car, they may be listed on the chalkboard. A sample hypothetical situation may be written as follows:

> "I'll bet you a coke I can be the first one in the car with my seat belt fastened!" shouted Jim to Helen and Alan as they started to the car where Jim's mother was waiting. As the challenge was accepted, each child raced for a separate door. Which rule for entering a car was violated? Why is it dangerous to disregard this rule?
>
> Answers given should include: Enter the car on the curb side. Never race to enter a car.

PROCEDURES FOR EXITING FROM A CAR - (Review)

When possible, always exit on the curb side of the car. If this is not practical, the following procedure should be followed.

1. Check street traffic from behind to side.
2. Open door slightly (6-8 inches) and check again.
3. When traffic is clear, open door far enough to exit to the rear staying close to the side of the car, proceeding to the sidewalk from the rear of the car.

Using the procedures listed above, have the students create hypothetical situations in which one or more of the procedures is violated. Upon completion, the class may conduct a Mock Court with judge and jury to determine which rule was violated. In addition, students may consult the Motor Vehicle Laws of Maryland, to determine if there have been driver or vehicle violations involved.

If the students are not familiar with the Procedures for Entering a Car they may be listed on the chalkboard. A sample hypothetical situation may be written as follows:

> John and Mike rode to school daily with John's father. They always rode in the back seat of the car. The boys were in a rush this particular morning. As the car came to a stop in front of the school, both boys unfastened their seat belts, opened their doors, and jumped from the car. Mike rushed toward the school. As he did so, he heard the screech of brakes and their tires on the pavement as he heard John cry out for help! Luckily for John, he was only scraped and bruised, but the back door on John's side was a mangled mess. The passing motorist had struck the door. Who was at fault? Why?
>
> Answers given should include the following: John is at fault for not following the procedures for exiting from a car street-side and/or exiting from a car curb-side.

INTRODUCTION:

As a follow up to the Seat Belt Survey taken in fifth grade, this activity provides students the opportunity of orally expressing opinions based on previous background information.

ACTIVITY - Pro's and Con's of Seat Belt Usage

Divide the students into small groups for discussion. Using the list provided, have each group be prepared to defend the position and answer questions about the topic they have selected.

PRO

1. Seat belts are good insurance; they may save my life and my job.
2. Seat belts prevent being ejected from the automobile.
3. Among passengers and drivers using seat belts and shoulder harness, no deaths have been reported at speeds under 60 mph.
4. Seat belts help hold a driver in place and in control of the car.
5. Unbelted children can cause accidents.
6. Injuries caused by seat belts are slight in comparison to injuries sustained by passengers not wearing seat belts.

CON

1. Seat belts aren't comfortable
2. Seat belts aren't manly.
3. Seat belts are too much trouble.
4. Seat belts are worn only by old people.
5. Seat belts insult the drivers if you wear them.
6. Seat belts are too much trouble to put on.
7. Seat belts wrinkle my clothes.
8. Seat belts slip my mind. I forget to put them on.
9. Seat belts trap me in my car.

CREATIVE WRITING - SEAT BELT MYTHS AND FACTS

Student hand-out sheets Master for Reproduction A through C used to give each student the opportunity to make individual responses to the facts and myths related to safety belts.

SEAT BELT - FACT OR MYTH?

Listed below are some facts and some myths about seat belt usage. Read both carefully; see if you can determine the real facts and explain why you think each statement is factual or mythical.

A. Using a seat belt an auto passenger is more likely to be unhurt, alert and capable of getting out of a car quickly.

B. A seat belt is likely to trap an auto passenger in a burning or submerged automobile.

____

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MASTER FOR REPRODUCTION A

SEAT BELT - FACT OR MYTH?

DIRECTIONS: Give handout to children. After reading the statements, have them write a statement indicating whether each statement is fact or myth. Answers are below.

ANSWERS

A is a "fact". B is a "myth".

Additional information:

Without a belt, the motorist may be dazed or stunned by the crash; this would increase the time it takes to get out of the car. Therefore the belt will speed up, rather than slow down the escape process.

Fire and submersion actually occur in less than one-half of one percent (.5%) of all serious accidents. (Including less-serious accidents - the "bumper-crumplers" - makes the proportion even smaller.)

SEAT BELT - FACT OR MYTH:

Listed below are some facts and some myths about seat belt usage. Read both carefully, and see if you can determine the real facts. Explain why you think each statement is factual or mythical.

A. Many motorists have been "saved" by being thrown out of a car.

B. The probability of death is almost five times greater when the motorist is thrown from the automobile.

MASTER FOR REPRODUCTION B

SEAT BELT - FACT OR MYTH?

DIRECTIONS: Give handout to children. After reading the statements, have them write a statement indicating whether it is fact or myth. Answers are below.

ANSWERS

A is a "myth". B is a "fact".

Additional Information

The forces in an accident are so great that a person ejected from an automobile can be flung 40 to 50 feet or more, from the car. (One body was found 150 feet from the car from which it had been ejected.) Whether this distance is covered through the air, scraping along the ground, or both, it is highly likely to have serious results. In other cases, the car door is sprung, the motorist falls out, and the car rolls over and crushes him. Despite any emotional fantasies about "being thrown clear," sheer common sense - based on extensive statistics - say it's better to stay inside the car.

A station wagon carrying a family of six was struck from the rear. It ran off the road and rolled over. The mother flew out the door and was killed when her head hit a rock. Three of the children stayed in the car; all had broken bones, but lived. The father stayed in the car and was not injured. When the police arrived, the father was frantically searching for the eighteen-month-old boy his wife had been holding in her lap. Half an hour later, they found the baby. Otherwise unharmed, he had drowned because he was hurled into six inches of water.

SEAT BELT - FACT OR MYTH

Listed below are some facts and some myths about seat belt usage. Read both carefully. See if you can determine the real facts and explain why you think each statement is factual or mythical.

A. If I'm just going shopping, why bother? I don't need to wear a seat belt while driving around town at low speeds.

B. More than half of the accidents causing injury or death occur at speeds less than 40 MPH. Three out of four accidents causing death occur within 25 miles of home.

____

____

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MASTER FOR REPRODUCTION C

SEAT BELT - FACT OR MYTH?

DIRECTIONS: Give handout to children. Ask them to read the statements and write a statement indicating whether each statement is fact or myth. Answers are below.

ANSWERS

A is a "myth". B is a "fact".

Additional Information

In a study of 28,000 accident cases, fatalities of non-belted occupants were spread over the whole speed-scale, starting as low as 12 miles per hour.

Speeds below 30 MPH accounted for 90% of the accidents, two-thirds of the injuries, and 54% of the deaths.

CREATIVE WRITING - THE DECISION IS YOURS

Masters for Reproduction D and E, pages 109 and 111, are designed as student handout sheets to give the student the opportunity to express his/her opinion on given statements.

EFFECTIVE ADVERTISING (Master for Reproduction F, page 113.)

INFORMATION

A shotgun scatters shot in a wide area. A target pistol is more direct, firing at only one specific area. In order to reach a wider range of people, a campaign for using seat belts must be designed to attract the many different interest groups.

INTERSTATE NUMBERING SYSTEMS

Master for Reproduction G, pages 115-116, are designed to acquaint the students with the designed plan for numbering the interstate highways.

PLANNING A VACATION

Master for Reproduction H, page 118 contains information on planning a vacation trip requiring map reading and math skills in computing mileage, miles per hour, travel time and gasoline mileage.

RESEARCH PROJECTS - COMPUTING GASOLINE MILES PER GALLON - MILES PER HOUR (Master for Reproduction I, page 120.)

1. The effect of seat belts in reducing injury and deaths.
    - a) seat belt alone.
    - b) seat belt and shoulder harness combined.

*NOTE: If the material is not available in the school library the student may need to use the public libraries.

ORAL REPORTING - HIGHWAY SYSTEMS

Research the history of our National Highway Systems and prepare a five minute oral report or a 5,000 word written composition.

THE DECISION IS YOURS

If you could get every driver and every passenger in every motor vehicle in the United States to use safety belts, you would be responsible for...

- saving 10,000 to 20,000 lives,
- lessening the hardships of more than 2,000,000 personal injuries,
- reducing wage losses of over three-billion dollars and medical expenses of around one-billion dollars and, possibly reducing the number of accidents, every year.

How would you answer people who give you these reasons for not wearing safety belts?

Seat belts are not comfortable.

Seat belts mess my clothes.

Seat belts are only worn by dull, old people.

"Automobile Safety Belt Fact Book," U. S. Department of Transportation, National Highway Traffic Safety Administration.

MASTER FOR REPRODUCTION D

THE DECISION IS YOURS

DIRECTIONS: This Master for Reproduction is designed as a student handout sheet to give the student opportunity to express his/her opinion on given statements.

THE DECISION IS YOURS

Seat belts and other safety devices are completely useless unless the driver and passengers make an effort to use them. It has been suggested that if a driver has an accident when he has clearly failed to use these safety devices, he should be considered guilty of contributory negligence and should not be entitled to any insurance settlement. How do you feel? What other ways can you think of to enforce the use of safety equipment?

MASTER FOR REPRODUCTION E

THE DECISION IS YOURS

DIRECTIONS: This Master for Reproduction is designed as a student handout sheet to give the student opportunity to express his/her opinion on given statements.

EFFECTIVE ADVERTISING

ADVERTISING CONCEPT

A shotgun scatters shot in a wide area. A target pistol is more direct, firing at only one specific area. In order to reach a wider range of people, a campaign for using seat belts must be designed to attract the many different interest groups.

As Grandma used to say, "Don't put all your eggs in one basket." If Grandma were running a safety belt campaign, she would . . .

a) Have as many people as possible preparing messages.

b) Have each person prepare as many different messages as possible.

On the basis of these statements, complete the following:

Write three or more safety belt slogans, each one designed to attract the attention of different age and interest groups.

"Automobile Safety Belt Fact Book," U. S. Department of Transportation, National Highway Traffic Safety Administration.

MASTER FOR REPRODUCTION F

EFFECTIVE ADVERTISING

DIRECTIONS: Give samples and ask children to write three safety belt slogans.

INTERSTATE NUMBERING SYSTEMS

This activity is designed to be used with the following map - Master for Reproduction G.

BACKGROUND INFORMATION

Route numbers in the hundreds are interstate spur routes - or beltways.

If they are around a city - the first figure is even.

If they are around a small town - the first figure is odd.

Interstate routes that run north and south - start numbering in the west and get higher as they move east.

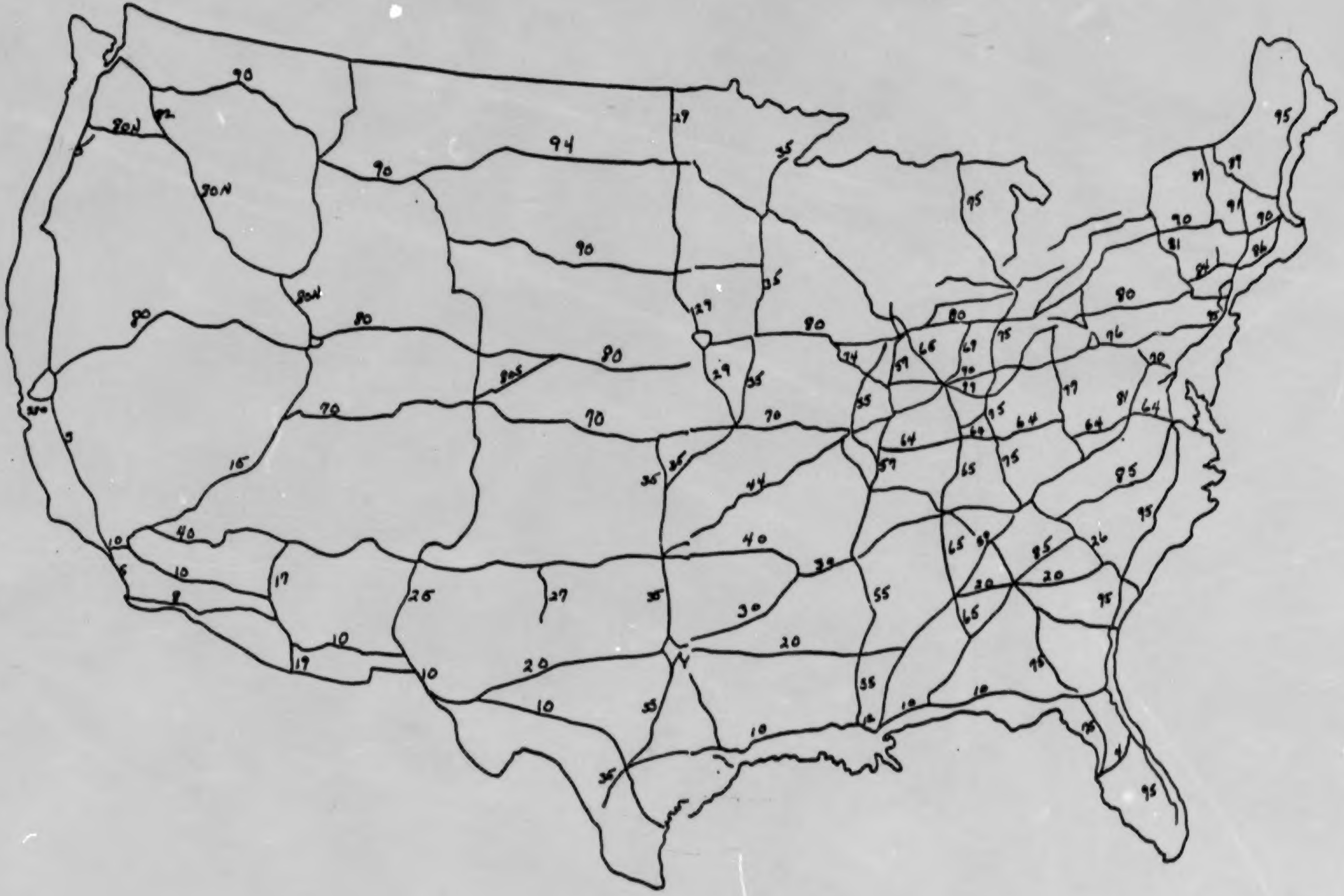
Interstate routes that run east and west - are low in the south and get higher as they move north.

Interstate Route Activity

1. List the numbers of the East-West Interstate Highways.
2. List the numbers of the North-South Interstate Highways.
3. What is the number of the Baltimore Beltway? (695)
4. What is the number of the Washington, D. C. Beltway? (495)

Interstate Highway Research Activity

Many of our interstate highways had their origins long before the invention of cars. Have the students research the origin of the U. S. highways and interstate routes.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MASTER FOR REPRODUCTION G

INTERSTATE NUMBERING SYSTEMS

DIRECTIONS: This Master for Reproduction is designed to acquaint students with the designed plan for numbering the interstate highways.

PLANNING A VACATION

Using a State map and the information provided, complete the following activities:

Point of departure for the vacation is Frederick, Maryland. Your destination is Wheeling, West Virginia, via Washington, Pennsylvania.

1. Select a preferred route of travel as well as an alternate route in the event of closed roads or highway construction areas.

2. Chart the routes on a map and list the highway numbers in the order you will follow them on your route of travel.

3. Compute the total number of miles you will be traveling.

   ____

4. Give fuel requirements in gallons if the car averages 15 miles per gallon, round trip.

   ____

5. Find the total cost of gasoline if the average price is $.38 per gallon.

   ____

6. If the car is filled with gas when you leave Frederick, and it has a 25 gallon capacity gasoline tank, how many stops for gas will be required?

   ____

7. Plan a 10 minute rest stop every two hours and a 45 minute stop for lunch. Speed of travel will be determined by the posted maximum speed limits on the chosen routes. If you average 60 miles per hour, how long will it take you to drive to Wheeling?

   ____

8. What time must you plan to leave Frederick if you are to arrive in Wheeling by 3:30 P.M.?

   ____

MASTER FOR REPRODUCTION H

PLANNING A VACATION

DIRECTIONS

Master for Reproduction pages 118-121 contain information on planning a vacation trip requiring map reading and math skills in computing mileage miles per hour, travel time, and gasoline mileage.

COMPUTING GASOLINE MILES PER GALLON - MILES PER HOUR

1. In 682.5 miles of driving, Mr. Mills used 35 gallons of gasoline. What was the average number of miles per gallon? _____

2. Mr. Mills'gasoline tank holds 25 gallons of gasoline. How many times would he have had to buy gas? _____

3. On the first day of a 1,200 mile trip, Jean's family drove 540 miles. What per cent of the trip had they completed? _____

4. Art drove 120 miles in 2¼ hours. His average rate was _______ miles an hour.

5. A man drives 96 miles in 3 hours. If he drives the same rate, how long will it take him to drive a distance of 160 miles? _____

6. Driving at an average of 40 miles an hour, Mr. Jones can travel 360 miles in _____ hours.

7. The Ryans went on a cross-country trip last summer. If they traveled 8,832 miles in 23 days, how many miles did they average in a day? _________

8. If Mr. Ryan's car used 552 gallons of gasoline on the trip, the car averaged _______ miles per gallon of gasoline.

9. If Mr. Ryan paid $.42 per gallon for the gasoline he used on the trip, how much did Mr. Ryan spend on gasoline? ________

10. Averaging 60 miles per hour, how long will it take Jim's father to drive 564 miles to Indianapolis, Indiana? __________

MASTER FOR REPRODUCTION I

COMPUTING GASOLINE MILES PER GALLON - MILES PER HOUR

DIRECTIONS: Give the children the handout. Have them read and complete the statements.

ANSWERS

1. 19.5
2. once
3. 45%
4. 53-1/3
5. 5 hrs.
6. 9
7. 23
8. 16
9. $234.81
10. 9.4 hrs.

GRAVITY FORCES AND FOOT POUNDS

INFORMATION

A car traveling 30 miles per hour strikes a concrete barrier. The car is carrying four dummy passengers that are constructed to resemble adult human beings in size, shape and weight.

On impact of the collision, the dummies are thrown forward with a force equal to thirty times their normal weight. To translate this into foot pounds, multiply the weight at one G by the number of G's. If each dummy normally weighed 150 pounds, during the collision its weight rose to about 4,500 pounds - over 2 tons.

G FORCE ACTIVITY

G Forces or Gravities

If you stand on a bathroom scale, it will show your weight. To be more precise, it shows your weight at normal earth gravity or one G.

Demonstration of G Forces

Obtain a spring scale. Using a small weight (one pound, if possible) attach a piece of heavy string to the weight, fastening it securely, make a loop in the other end of the string. The string must measure 12 inches between the weight and the outside end of the loop. Hold the spring scale securely on the edge of a table top. Drop the weight. Tell what weight registers on the scale.

Repeat the above activity, using a string that measures 2 feet from the weight to the loop. What weight registers on the scale?

Weight and G Forces Activity

Using a bathroom scale have the students in pairs weigh themselves, then bounce up and down on the scale to see if they are able to reach the level of 2 G's in order for them to realize the force involved in G Factors.

Foot Pounds - Information - Demonstration

Information: Energy can also be expressed in foot pounds. One foot pound is simply the amount of force required to lift an object weighing one pound a vertical distance of one foot. A force of five foot pounds is capable of lifting one pound five feet or five pounds one foot.

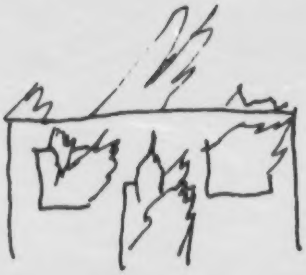
To show the force of impact that a freely falling object can impart on a fixed object.

Demonstration: Construct a small lever and fulcrum. To make it, have a suggested support height of 12 inches, and a length of lever 3 feet (a sturdy yard stick may be used). Place or hang a one pound weight on one end, and drop a two pound weight on the opposite end of the lever. Observe the action of the one pound weight when the force of a two pound weight is exerted on it. Repeat the above activity using a three pound weight. More complete details can be found in science books.

REPORTING DEMONSTRATIONS

Have the students write a report on each of the experiments or demonstrations. Have them describe the experiments and report their findings.

SCHOOL ENVIRONMENTAL SAFETY ACTIVITIES



UNIT OBJECTIVES:

1. The student will acquire the knowledge to effectively cope with potential hazards within the school environment.
2. The student will be able to follow recommended procedures when confronted with simulated or real disaster warnings.

OBJECTIVE: The students will be able to demonstrate their knowledge of Fire Drill Procedures as measured by their performance during an actual fire drill.

CONCEPTS TO BE DEVELOPED:

1. Fire Drill Procedures are designed to get people out of a building as quickly as possible.
2. Calm, orderly behavior is essential in exiting from a school building during a fire drill.

TEACHER INFORMATION

Fire drill evacuation procedures vary from county to county as well as from one school to another within a county. Teachers should have a list of procedures for fire drills and post it in the classroom. Each teacher should know the specific procedures that pertain to her classroom, i.e.:

1. What route to take during a fire drill.
2. How to line the children up.
3. Where the children evacuate to.

The procedure should be practiced before the first scheduled fire drill for the year, and practice should continue throughout the school year.

INTRODUCING THE FIRE DRILL PROCEDURE

During the first few days of school, the teacher should introduce the concept of the FIRE DRILL. Discussion should include:

1. Why an orderly plan of exit is necessary.
2. Why schools have fire drills and what a fire drill is.
3. What might happen if the school did not have a fire drill.

Emphasis should be on purpose and procedures. Rules and procedures should be listed in sequential order. For non-readers pictures should accompany the procedures.

1. STOP WHAT YOU ARE DOING AND PUT EVERYTHING DOWN.
2. NO MATTER WHAT THE WEATHER IS LIKE, DO NOT GO FOR YOUR CLOTHING.
3. LINE UP IN AN ORDERLY MANNER.
4. LAST STUDENT IN LINE CLOSES THE DOOR.
5. WALK OUT IN A STRAIGHT LINE WITHOUT TALKING.
6. WALK TO ASSIGNED EXIT.
7. STAY BEHIND THE PERSON THAT WAS IN FRONT OF YOU.
8. REMAIN IN A STRAIGHT LINE WITHOUT TALKING UNTIL THE ALL CLEAR SIGNAL IS HEARD AND TEACHER GIVES YOU PERMISSION TO RE-ENTER THE BUILDING.

EMERGENCY CONDUCT PROCEDURES

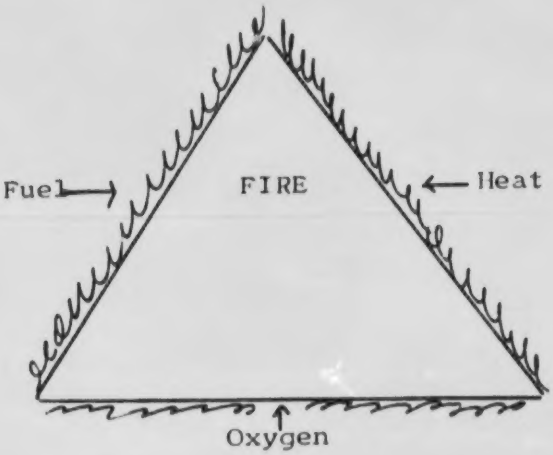
Explain why it is important to remain calm during an emergency and to know what to do to remain safe.

a) Keep moving - (no stopping to go back for clothes, books, equipment).

b) Clear out - (so you won't block exits or streets from fire-fighting equipment).

c) Stay with your group (so your teacher knows you are safe).

TEACHER INFORMATION



Wood doesn't burn in a solid form. It changes to gas and it is the gas that burns.

Combustion - a rapid chemical combination of oxygen with a substance such as carbon or some other element.

Oxidation - when something combines with oxygen.

Kindling Temperature - the lowest temperature at which a substance will catch fire and continue to burn. A low kindling temperature can be found at the striking section of a match; however, the end made with wood or paper is higher. Water on a fire makes the temperature go below the kindling point.

Flash Point - the lowest temperature at which a liquid will catch fire and continue to burn.

Heat Energy Movements

a) Conduction - when molecules move faster and faster and eventually move from the area of contact with heat to an area away from heat. EXPERIMENTS - Good conductors--

Poor conductors. Objects may be placed next to an area of heat (radiator--hot plate) to find out whether or not they are good conductors. Samples--metals, wood, cloth. The poor conductors such as cloth can be used to hold the good conductors. Discuss how good and poor conductors can be useful and nonuseful.

b) Convection - the uneven heating of gas--liquid which causes the cold air to push the hot air up. Convection aids trapped firemen and other trapped people. The air nearest the floor is cooler and clearer; and therefore people trapped in a fire should crawl along the floor so that they can see better and breathe and thereby exit.

(Convection and Conduction need solids, liquids, or gases in which to move.)

c) Radiation - is a type of electromagnetic energy emanating directly from the sun at 186,000 miles per second. When the energy hits the earth, it is re-radiated upward.

SIGNIFICANCE - when a magnifying lens is placed on paper, it will concentrate the rays of the sun and cause the paper to burn. This can be shown as an experiment, and the children can discuss why it is or is not important to the classroom. It would be of further importance to the class to relate to how hot objects also radiate heat (infrared rays). If it is close to an object that ignites easily, it may cause a substance to ignite even though there may be an object between or a distance from the area of radiation.

Mushrooming - after fire and smoke have filled the bottom of a building, there is no way horizontally for it to escape, it expands to the top of the area. Ventilation must be made for smoke and heat to escape.

Backdraft - occurs when ignition and combustion of flammable gasses or dust mix with the air due to poor ventilation. This poses a danger to people opening doors.

Surface Tension - attraction of water molecules for other water molecules. Additives are used to lessen the tension.

Water-Carbon Dioxide-Chemicals - water is used for extinguishing fires mainly because

1. there is so much of it
2. a) it flows through hoses
   b) can be brought from a distance
   c) it takes considerable heat to build up water temperature.

Water cannot be used on fuel fires such as oil, gas or kerosene, since they don't mix with water. Fuels are lighter than water. Because of this, they float and move along with the water as it spreads. Experiment: place one of these chemicals in a water filled beaker. Discuss the results.

Voltage - Conduction of electricity to a person holding a hose. Therefore, solid streams aren't used at a close range.

Waterfog - A fine mist made by water to absorb heat from a fire. A special water nozzle is needed for this.

Scuppers - water has weight. Therefore, some allowance has to be made for it to escape. Often water will follow the stairs. Scuppers are used on the sides of walls for drainage outlets.

Equation - water goes into absorbent materials. A gallon of water weighs 8½ pounds. One cubic foot of water weighs 62.4 lbs. To find the cubic feet for a room use this equation length multiplied by width multiplied by one. Take the answer of the equation and multiply it by 62.4, (cubic foot of water) to find out how many pounds of water. This will tell you the average weight of cubic feet of water in a given room.

Wetting agents - chemicals that have been dissolved in water so that the water can penetrate absorbent materials like hay.

FIRE TRIANGLE

1. Introduce the fire triangle to the class at the chalkboard. Emphasize that all three parts are necessary to create fire. Have the children relate situations that occur when one part of the triangle is added. For example, in a forest there is wood and oxygen. What then is added to create the fire? (Match--fire from a cookout--or lightning.)

2. Bulletin Board - The fire triangle is placed in the center of the bulletin board - "If." Divide the area around the triangle into sections and have the children illustrate the situations that may develop. Children can then write how they can escape possible hazardous conditions. They could add details to complicate the situation and give possible solutions as to

    a) How to put the fire out

    b) How to signal the alarm

    c) How to exit from the building under given circumstances

3. **Emergency Family Fire Escape Map** - Assign children and parents the task of planning an Emergency Family Fire Escape Map. When completed, maps should be returned to their class and the children should discuss exiting procedures. In this way, the child's concepts of exiting are reinforced. When children's maps are completed and routes checked, have them take home to be placed in an obvious location for possible future family home fire safety drills.

4. **Research - Fire Laws** - Ask the children to look up and locate specific fire laws that have been written for schools. Have them note the laws and list the reasons as to why the law was written. These could be presented to children in lower grades by using drawings and discussions.

5. **MASTERS FOR REPRODUCTION**

   A - Classroom Fire Exit Route

   B - Fire Drill Procedure

   C - Who Knows What About Fire?

6. **Collect Stories** - Ask the students to collect stories about fires from the newspapers and paste them in a scrapbook. For each one, discuss the cause of the fire, how the three fire triangle elements were combined and how the fire could have been prevented.

7. **Visit the Local Fire Station** - Have pupils write stories and draw pictures illustrating what they saw on their visit. Write letters to the firemen thanking them not only for their tour, but also for the services they provide to the community.

8. **Tour Your School Building** - Tour your school building, looking for fire equipment. Note such devices as automatic fire doors, sprinklers, alarm systems, stairway enclosures, fire extinguishers -- and the location of each. Ask a member of the fire department or your school's safety supervisor to accompany you and perhaps demonstrate the use of different fire extinguishers and alarm boxes found in the building.

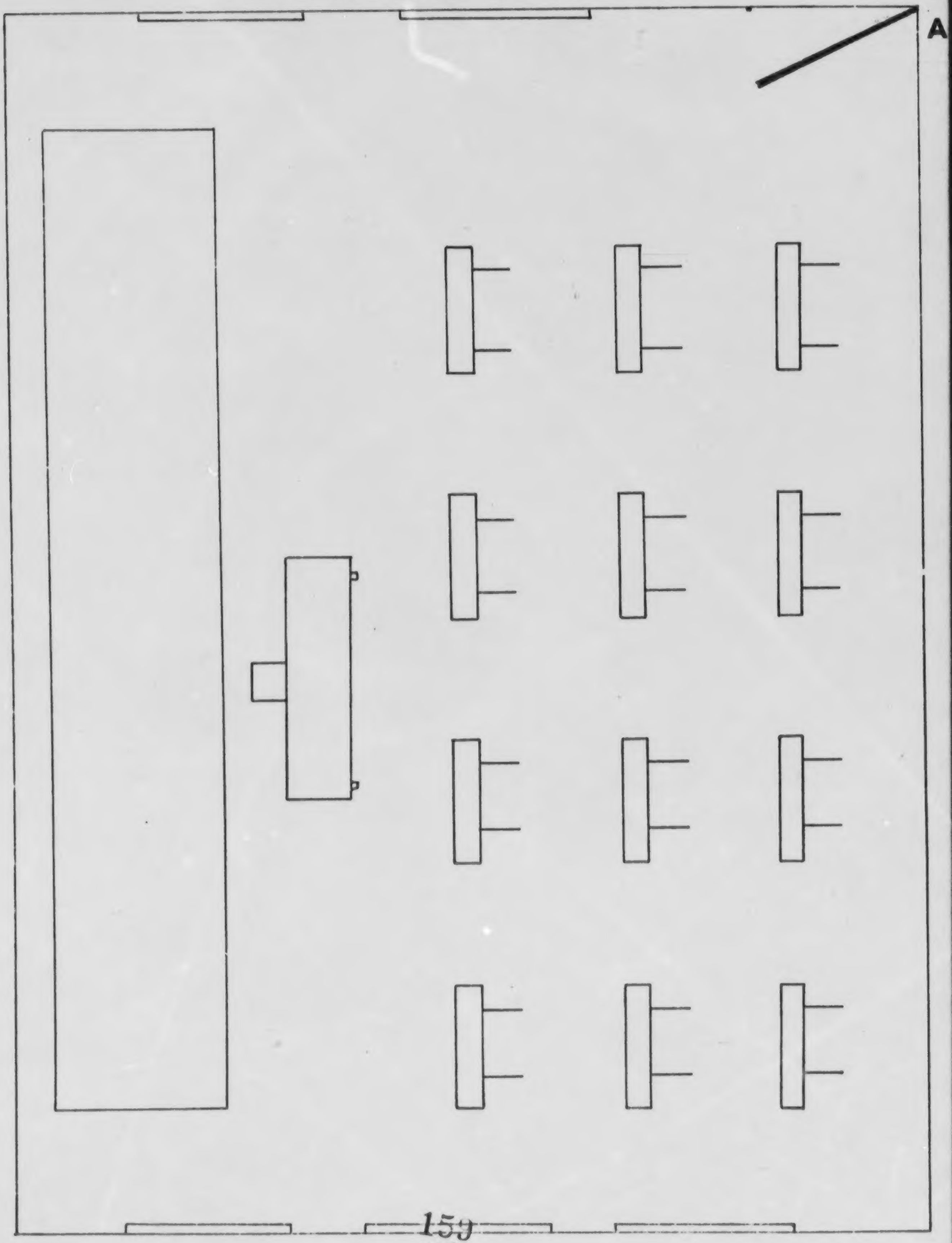
9. Make a Fire Chart - On one side list the good uses of fire---those that are beneficial to man. On the other side list the abuses of fire---those that are harmful to man.

10. Have Pupils Locate the Fire Alarm Box-Have pupils locate the fire alarm box, fire hydrant and fire station nearest their homes. Have them draw rough maps of their neighborhood showing the approximate location of each.

11. Build a Fire Safety Vocabulary - Ask the students to write an essay using the following terms with their proper definitions: fire engine, alarm, chief, fire drill, lightning, hydrant, ax, fire extinguisher, flammable, siren, pail, nozzle, combustion. (Study the difference between flammable and inflammable.)

SCHOOL SAFETY MAGAZINE
September-October 1965

EXIT ROUTE FOR FIRE DRILL



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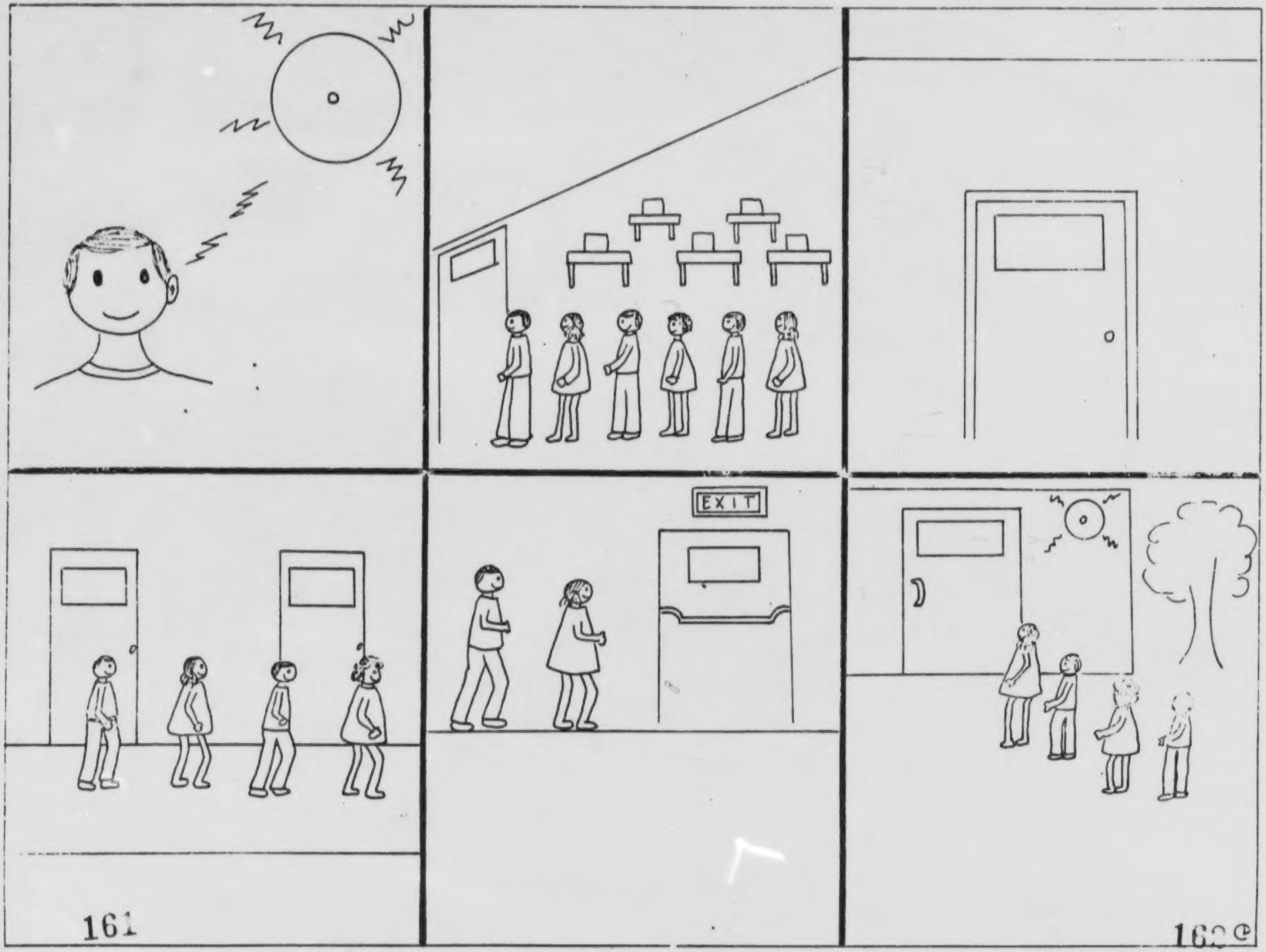
MASTER FOR REPRODUCTION A

EXIT ROUTE FOR FIRE DRILL

DIRECTIONS

Distribute ditto and discuss proper exit from classroom. After discussion have children draw in the route from their seat to the exit door.

FIRE DRILL EXIT PROCEDURE



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B

MASTER FOR REPRODUCTION B

FIRE DRILL EXIT PROCEDURE

DIRECTIONS

Distribute the ditto and discuss each step in sequence with the children. For further emphasis, have children cut out pictures in random order and place in proper sequence.

C

I

1. If you discover a fire in your room, you should try to put it out. [✓ True] or false.

2. Sleep with your bedroom door OPEN.

3. Costumes for parties, plays and Halloween should always be made of FLAME PROOF material.

4. Be sure to leave appliances plugged in while they are not in use. [✓ True] or false.

5. You should know at least TWO escape routes from both your home and your school.

II

1. Never carry matches loose in your pocket. [✓ True] or false.

2. If your clothes catch on fire standing still will make the flames spread faster.

3. If you suspect fire, feel the door knob and the edges of the door. If they feel warm, don't open the door.

4. If you should have to travel through smoke to get out of a building, keep a handkerchief over your mouth and stay near the floor.

5. Never return to get something from a building that's on fire. True or [✓ false.]

III

1. The effects of smoke kill more people in fires than burns do. True or [✓ false.]

2. Close the cover of a matchbox; then strike the match ([✓ away from,] toward) yourself.

3. If you want to report a fire and don't know the fire department's number, what can you do? Dial O To Reach The Operater.

4. If your clothes should catch on fire outdoors, drop to the Ground and Crawl.

5. One reason for not going near a fire is that there is always the danger of an Explosian.

IV

1. Burning trash on a windy day is dangerous because blowing flames or burning particles may ignite nearby houses, yards, or buildings. [✓ True] or false.

2. Break stick matches in two before throwing them away. [✓ True] or false.

3. Close-fitting garments are LESS hazardous than loose-fitting ones.

4. What's the best first aid treatment for a burn? PUT BURNED PART IN COLD WATER

5. What are the three things that are necessary before there can be a fire? OXYGEN, HEAT, FUEL

MASTER FOR REPRODUCTION C

WHO KNOWS WHAT ABOUT FIRE ?

DIRECTIONS

READ THE FOLLOWING DIRECTIONS TO YOUR STUDENTS AFTER YOU HAVE DISTRIBUTED THE MASTERS FOR REPRODUCTION.

On the page you have been handed are four quiz papers turned in by students-let's call them SONIA, JESSE, CRAIG, and BARBARA-from four different schools. Each school was given a different quiz. The papers are not graded and they are not signed. They are just the quiz papers as they were marked by our four mythical students. Given the following information, can you figure which paper belongs to which student?

WRITE ON CHALKBOARD

SONIA has a perfect paper. Every answer is correct.
JESSE missed one question and part of another.
CRAIG missed three questions. Two of those he missed were true and false questions.
BARBARA missed two questions. On one of these she filled in the blank incorrectly.

In the space below each quiz paper write in the name of the boy or girl to whom you think that paper belongs.

CORRECT ANSWERS

I. CRAIG-1. Wrong, you should get out as fast as you can. 2. Wrong, should be "closed." 3. Right. 4. Wrong, they should always be unplugged when not in use. 5. Right.

II. BARBARA-1. Right. 2. Wrong, should be "running." 3. Right. 4. Right. 5. Wrong, you should never return to a burning building to get anything.

III. JESSE-1. Wrong, this statement is true. 2. Right. 3. Right. 4. Half wrong, you should drop to the ground and roll. 5. Right.

IV. SONIA-1. Right. 2. Right. 3. Right. 4. Right. 5. Right.

SCHOOL SAFETY MAGAZINE
October 1970

OBJECTIVE:

After experiencing a series of activities on school safety, the student will be able to identify at least four areas of precaution on the school grounds or building.

CONCEPT TO BE DEVELOPED: Basic rules of conduct and procedure apply in the school building and on the school grounds, just as they do in the traffic environment.

SAFETY CAREERS

1. Panel Discussion-Have the children research the necessary background for developing concepts that pertain to various aspects of safety in the school, i.e. the people who developed the fire extinguishers, people who develop nonbreakable items such as various plastic products that can be used for experiments rather than glass, architects who've designed the entire building for maximum safety such as fire exits, etc. After the children have looked up background information and/or contacted individuals, have them discuss as a panel the people and their backgrounds that are needed to make a safer environment. A point to consider is if students are interested in these safety professions as a career.

2. Safety Fair-Very often schools have exhibits pertaining to various areas of study. Have the children reproduce or invent new safety features that can be used in or around the school. They could write an essay, make a drawing or panorama box, or make actual models.

3. SAFETY THROUGH THE HOLIDAYS

Throughout the school year, various holidays are observed. During these holidays certain dangers exist that are related to the holiday fun, i.e., Halloween - children wearing clothes that are too long, wearing masks that they're unable to see out of, carrying objects like brooms or wands that are difficult for small children to handle, etc. Have members of the class divide into groups and survey the safety aspects for each of the holidays. Have each of the groups compose stories to go along with their materials, diagrams, etc. Have them present this information to the children in the primary grades before the start of each holiday.

4. ENVIRONMENTAL

What is the environment? There is much emphasis today on the environment around us. The environment is natural or man made. An example of the man made environment would be the school building. Many parts and features of a school building have been designed with safety in mind, i.e. pads used in the gym for use under equipment in case a child should fall, or the use of gym shoes on the gym floor. Have the children conclude that buildings and equipment have been changed in design so that the school will be a safer place. Have the children research the designs of schools in the past. Suggest that they look in magazines, encyclopedias, books that show the history of interior decoration and architecture designs of the past. Have the children note the difference in design between buildings of the past and those of today. Have them investigate why the changes were made.

5. SAFETY-POETRY

Poetry is a unique way of saying something very special. Give the students the following poetry forms, and have them select one form and create an original poem that expresses a safety concept.

CINQUAIN POETRY

The name cinquain comes from the French word "cinq" (pronounced "sank") , which is the number five in that language.

Each verse has five lines; each line has a specific number of syllables. This is the form for cinquain:

2 syllables
4 syllables
6 syllables
8 syllables
2 syllables

Each poem is one complete thought. The top line and the bottom line are alike.

SAMPLES:

playground
running, jumping
someone yells, "Let's play ball,"
watch what you're doing when playing
don't fall

across
on the green light
when cars have stopped coming
but first making certain that it's
quite clear

fire licks
roaring, hungry,
takes everything with it
unless you can smother the flames
out, dead

broken
toy; sharp edges
or parts that are missing
rusty nails, prickly pins - beware
repair

buckle
pulling it snug;
from left side to right side
secure while you ride in the car
seatbelt

driving
your bicycle
in dark shadows of night
is the right time for wearing white:
be seen

"POISON"
printed warning
skull and crossbones showing
clearly labeled for protection
caution

burning
clothing on fire
lie down flat - do not run-
but roll in a blanket or rug
keep cool

HAIKU POETRY

Haiku, a form of Japanese poetry, is a disciplined yet creative method of expressing a complex, abstract idea. The form consists of three lines of five syllables, seven syllables and five syllables.

Within these seventeen syllables a single thought is expressed that creates an image in the mind's eye. This thought-image is the distillation of a complex concept.

Haiku and safety combine with some interesting results as you can see here. Use these examples to introduce to your class to Haiku. Let them discover in a free discussion session what the elements of Haiku are. Then start them off writing their own by asking them to describe what it feels like to be safe, what danger is, etc., within the discipline of Haiku.

SAMPLES:

City traffic makes
Noises like ferocious beasts
Prowling in jungle.

Rock warmed by golden
Sun sleeps next to earth with no
Wish to go higher.

Blue water shining
Lures swimmer far from circle
Of safe returning.

Ribbon roads stretch far
Calling laughing children to
Wander along them.

LIMERICKS

A kind of humorous verse of five lines, in which the first and second lines rhyme with the fifth line and the shorter third line rhymes with the shorter fourth line.

SAMPLES:

If you walk when the light is on red,
You might find yourself staying in bed;
Stop on red, walk on green,
Wait on yellow between,

____
(Children complete sentence.)

If you're riding your bike when it's night,
Don't forget reflectors and light;
If you don't have them there,
Then you're taking a dare.

____
(Children complete sentence.)

When the fire bell rings loud at your school,
Just remember to heed the rule
That reminds you to walk,
To your classmates don't talk,

____
(Children complete sentence.)

OBJECTIVE: The student will be able to conduct himself in accordance with instruction during a simulated disaster drill.

The student will be able to identify each warning and the basis of each pending disaster warning.

INTRODUCTION OF DISASTER DRILL PROCEDURE

Familiarize the children with the disaster drill procedure during the first few days of school so that they'll be prepared for the initial drill. (Procedures vary from county to county.)

1. HYDROLOGIC CYCLE AND THE STUDY OF LAND - (Overhead transparency) Have the children research the hydrologic cycle. Point out that precipitation changes with temperature. Have them draw the cycle on a chart. Direct the children to find pictures of various terrains. Have them discuss what effect the cycle has on the terrain at different times of the year, i.e., sloping hillside in summer (rain), winter (snow). Ask the children how these features would affect a person buying a house in that area or a pedestrian walking in the area, etc. These landscapes can be drawn onto transparencies, and these can be used for the class discussion.

2. TYPES OF STORM WARNINGS - Ask children to research the different kinds of storm warnings. Examples could include:

   Small craft warnings - if hurricane is within a few hundred miles of coast.

   Gale warnings - winds of more than 39-54 MPH.

   Storm warnings - when winds blow at speeds of 55 MPH and above. If storm approaches coast, it then becomes a hurricane warning.

Hurricane advisories - formal messages issued each six hours concerning tropical storms and hurricanes. They give information on where a storm is located, how intense it is, where it is moving, and what precautions should be taken. When a hurricane is near the mainland, more frequent messages called bulletins are issued to supplement the advisories.

Hurricane watch - formal warning issued warning residents as the hurricane continues to approach the mainland and is considered a threat to coastal and inland regions, meteorologists issue a hurricane watch for the regions in the calculated path. It doesn't mean the hurricane is definitely going to strike, it means everyone in the area should watch more carefully for the hurricane and be prepared to act quickly if definite warnings are issued that the hurricane will strike.

Hurricane warning - a formal message issued in coastal area where winds of 74 MPH or higher are definitely expected to occur. A warning may include coastal areas where high waters are predicted even though the winds expected may be of less than hurricane force. When issued, all precautions should be taken immediately. Warnings are seldom issued more than 24 hours in advance.

Tornado watch - a formal message issued as the first alerting message from the National Severe Forecast Center to areas where tornadoes may occur during the next several hours. Watches alert people in the potentially threatened area to the possibility of tornadoes and advise them to get ready for immediate action if a tornado is sighted. It is broadcasted and the emergency authorities are notified.

Tornado warning - formal warning issued when an actual tornado has been sighted. Warning is then sent over television and radio indicating: time of detection, the area through which it is expected to move, and the time it is expected to strike.

INFORMATION FOR THE TEACHER

Severe Weather

Hurricanes are large revolving storms accompanied by violent and destructive winds, heavy rains and high waves and tides.

A hurricane is technically described as a cyclonic storm of the tropics. The storm has different names in different parts of the world-typhoons, tropical cyclones, and hurricanes-but they all belong to the same family. Along the southern and eastern coasts of the United States and in the Atlantic Ocean, the Caribbean Sea and the Gulf of Mexico, they are known as West Indian Hurricanes.

Hurricanes originate over water areas not far from the equator, where the air is warm and moist. The first indications are usually a vast area of unsettled weather. The air begins to move toward and around a central area where a barometer is falling. As this air moves, it gradually assumes a circular motion around a center of lowest pressure. Then the whole system begins to move, much as a moving top moves across a smooth surface. The circular motion becomes more violent as the hurricane develops and often reaches speeds in excess of 100 mph. The forward motion of the hurricane is usually 10 to 15 mph.

Tornadoes are the most violent and spectacular storms produced by nature. They have occurred in every state, but the greatest frequency of occurrence has been in Iowa, Texas, Kansas, Oklahoma, Arkansas, Missouri and Nebraska. Most of them happen during the months of May and June between the hours of 3 and 6 pm.

Tornadoes usually move toward the northeast at a speed of from 25 to 40 mph. However, the wind velocity within the center of a tornado has never been measured. The lengths of their paths average 10 to 40 miles, and their width averages 300 to 400 yards.

Warning signs preceding tornadoes are: dark, thick, storm clouds; heavy rain or hail; a tremendous roaring or rushing sound and the black funnel-shaped cloud. The sound of a tornado has been likened to that made by "several trains speeding through a tunnel or over a trestle."

Blizzards often begin quite suddenly after beautiful, but out of season, sunny skies and spring-like weather. This phenomenon in itself should be a warning to people living in blizzard country. Blizzards differ from ordinary snow storms because of their terrifically high winds filled with fine snow and accompanied by intense cold.

Flash floods are usually sudden, small-area deluges of water which only last for a short time.

A flash flood could include two kinds of situations: one, where there is a sudden downpour of rain; the other, where a dam breaks or is washed out, releasing a large amount of water suddenly.

Flash floods are most likely to occur in the so called "rainy season" or in the early spring, when melting snows increase water volume.

Of course, these various types of severe weather are more likely to occur in some sections of the country than in others. Your pupils might investigate which could occur in your particular locale and with the help of the local weather bureau, make checklists of safety rules for these weather situations.

SCHOOL SAFETY MAGAZINE
NOVEMBER-DECEMBER 1965

HURRICANE

APPROACHING STORM

Get and use only official information. Keep radio or TV on and listen for latest official storm information. If power fails, use battery radio and continue to listen throughout the storm. Decide what you are going to do and where you are going to stay. If near a coastal area, residents should get away from low-lying beaches or other locations which may be swept by high tides or storm waves. Be sure there is extra food and that it can be eaten without cooking or little preparation (non-refrigerated). There may be a shortage of water, therefore, fill containers full with water. Make sure flashlights and other emergency lights are working and nearby lanterns and candles can be used, and if so, be sure that matches are nearby. If walking for protection, be aware of blowing objects. If driving for protection, have a full gas tank for the pumps run on electricity and if there is a power failure, there wouldn't be any gas.

DURATION OF STORM

Be calm and cautious and continue to listen to reports from the weather bureau, Red Cross, and other local agencies. Keep inside. Close window on windward side and keep one open on leeward side if it is a tornado or hurricane. If the center or eye of a hurricane passes directly over you, there will be a lull in the wind lasting from a few minutes to ½ an hour or more. Stay in a safe place. During and after a storm, washed out or flooded highways, streets, may be blocked by fallen trees, poles and wires... avoid them. Stay away from disaster areas. Walk and drive cautiously. Be aware for trees or branches that may be weakened and ready to fall, for buildings that may be near collapse, and for bridges or roads that may be damaged or ready to give way under the added weight of passing cars. Debris-filled streets are dangerous so keep your eyes on the road. Along the coast, and near streams, the soil may be washed from beneath the pavement, which may collapse under the weight of vehicles.

TORNADO

Go for shelter. If in open country, move away from it at right angles. If unable to escape, lie flat in the nearest ditch or ravine. If near a building, go inside--preferably in a steel-reinforced building. Avoid auditoriums, gymnasiums, or other large halls with large poorly supported roofs. If in a house, stand in an interior hallway or a lower floor, or climb under heavy furniture in the center of the house. Safest spot is the corner of the basement toward the direction from which the tornado is approaching. Place hands over head - squat. If there is insufficient time to go to shelter, students should go to inside wall of the room away from windows, squat on the floor next to a wall, keep head down or get under the desks or furniture either by squatting or lying prone on floor, face down.

BLIZZARD

Several layers of loose-fitting, lightweight but warm clothing are best protection against the cold. Mittens, tight at the wrists are warmer than gloves with fingers. If vehicle gets stuck, stay with it where rescuers can more easily spot you. Don't attempt to walk for help, for it is easy to lose direction and become lost. Don't stay in one position for too long. Clap your hands and move arms and legs vigorously from time to time to stimulate blood circulation and keep muscles from getting cramped. Buses have 2-way radios to use for calling help. There may be an early dismissal from school. School bus driver should care for children he is unable to deliver. In the morning, listen for school closings on the news.

FLOODS

Bus--during a flood, it may be necessary for a bus to use an alternate route. If so, parents must be notified in advance as to adjusted bus routes, where the child will be picked up and taken to.

SUBJECT AREA CROSS REFERENCE

KEY: G - Group
I - Individual
T - Teacher Directed Activity
* - Master for Reproduction

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KEY: MATH - Mathematics
MUSIC - Music
ART - Art
RDG - Reading
NISA - Non-Integrated Safety Activity
SCI - Science
SS - Social Studies

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2. *Hearing With Ears - A	Sci	T-I	4-6
3. *How Do You Read a Signal Light? -	Rdg	T-I	49,59
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9. *Selecting Differences - G	Math	T-I	12,19
10. *Shape Recognition - Rectangle - F	Math	T-G-I	12,17

11. * Shape Recognition - Square - D	Math	T-G-I	12-14
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17. *Traffic Safety Chart - P	Rdg	T-I	49,53
18. * Unscramble Sentence with Laws - R	Rdg	T-I	49,57
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1. *At the Stop - A	Nisa	G-T	70-72
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3. *Language Arts - Advertising - C	Rdg	T-G-I	85,90
4. *Maryland Bicycle Law - B	SS	T-G-I	85,88

5. *The History of the Bicycle - D	SS	T-G-I	85,92
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2. *Creative Writing - The Decision is Yours - D,E	Rdg	T-G-I	108-112
3. *Effective Advertising - F	Rdg	T-I	108,113
4. *Interstate Numbering Systems - G	SS	T-G-I	108,115
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6. *Seat Belt - Fact or Myth? - A,B,C	Rdg	T-G-I	102-107

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3.* Relationship of Speed, Time & Distance - N		T-G-I	30,40
4.* Selecting Differences - G		T-I	12,19

5.* Shape Recognition - Rectangle - F	T-G-I	12,17
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Booklets, Pamphlets and Magazines

American Association for Health, Physical Education and Recreation. *Cycling in the School Fitness Program*. 1201 16th St., N.W., Washington, D. C.: American Association for Health, Physical Education and Recreation, a Department of the National Education Association, 1963.

American Association for Health, Physical Education and Recreation. *School Safety Policies*. 1201 16th St., N. W., Washington, D.C.: American Association for Health, Physical Education and Recreation. ($1.00 per copy).

American Automobile Association. *How to Organize and Supervise a School Safety Patrol*. Washington, D.C.: American Automobile Association, 1966.

American Automobile Association. *Manual on Pedestrian Safety*. Washington, D.C.: American Automobile Association, 1964.

American Automobile Association. *The Young Pedestrian*. Washington, D.C.: American Automobile Association.

American Automobile Association. *10 Otto the Auto Stories*. Washington, D.C.: American Automobile Association, 1969-70.

American Automobile Association. *10 Traffic Safety Guides*. Washington, D. C.: American Automobile Association, 1969-70.

Baltimore City Public Schools. Safe Bus Travel To and From School. Baltimore, Maryland: Baltimore City Public Schools, 1972.

Berzina, E., Kramer, M. *An Investigation of Rider, Bicycle and Environmental Variables in Urban Bicycle Collisions*. Ontario, Canada: 1970.

Bicycle Institute of America. *A Guide to Audio Visual Materials on Bicycles and Bicycle Safety*. New York, New York: Bicycle Institute of America, 1971.

Bicycle Institute of America. *Bicycle Safety Tests and Proficiency Course*. New York, New York: Bicycle Institute of America.

Bicycle Institute of America. *Bike Ordinances in the Community*. New York, New York: Bicycle Institute of America, 1972.

Bicycle Institute of America. *Bike Safety Programs*. New York, New York: Bicycle Institute of America.

Bicycle Institute of America. Bike Trails and Facilities. New York, New York: Bicycle Institute of America.

Board of Education of Baltimore County. Safe Travel To and From School. Towson, Maryland: Board of Education of Baltimore County, 1965.

Board of Education. School Bus Transportation Rules and Regulations. Hagerstown, Maryland: Board of Education.

Board of Education of Montgomery County. What You Wanted to Know About the School Bus - But Didn't Know Where to Ask. Montgomery County, Maryland: Division of Transportation - Montgomery County Public Schools.

Board of Education of New York. Science Grade 5. New York City: Board of Education, 1966.

Board of Education of New York. Science Grade K-2. New York City: Board of Education, 1966.

Campbell, B.J., Foley, J. P., Pascarella, E. A. Bicycle Riding and Accidents Among Youths - A Summary Report. Chapel Hill, North Carolina: Highway Safety Research Center.

Channing L. Bete Co., Inc. Join the School Bus Safety Team. Greenfield, Mass.: Channing L. Bete Co., Inc., 1972.

Channing L. Bete Co., Inc. What Everyone Should Know About Alcoholism. Greenfield, Mass.: Channing L. Bete, Inc., 1969.

Channing L. Bete, Inc. What Everyone Should Know About Bicycles. Greenfield, Mass.: Channing L. Bete Co., Inc., 1968.

County of San Diego. School Pedestrian Safety Policies and Warrants. San Diego, California: Compiled and printed by the Engineer Department, County of San Diego, 1969.

Department of Public Instruction. A Bicycle Safety Instruction Guide for Teachers. Harrisburg, Pennsylvania: Commonwealth of Pennsylvania, Department of Public Instruction, 1966.

Department of Safety Education. Safety at the Crossing. Illinois: Department of Safety Education, Office of Public Instruction, 1970.

Dunn, Gordon E., Miller, Banner I. Atlantic Hurricanes. Louisiana: Louisiana University Press, 1964.

Fales, Edward D., Jr. *Why Today's Cars are Safer*. Pleasantville, New York: Reader's Digest, December, 1972, pp. 61-65.

General Motors. *The Hazard Family*. Oldsmobile Division, General Motors.

Instructor. *Bus Safety*. August/September, 1972, pp. 112, 113.

Instructor. *Fire Prevention*. October, 1972, pp. 76-77.

Instructor. *Pedestrian Safety*. November, 1972, pp. 108, 109.

Instructor. *Seat Belts*. December, 1972, pp. 62-63.

Maryland State Department of Education. *A Study of the Availability and Nature of Information on School Bus Accidents Recorded at the Local Level*. Baltimore, Maryland: Maryland State Department of Education.

Maryland State Department of Education. *Bicycle Safety Teacher's Guide*. Baltimore, Maryland: State Motor Vehicle Department in cooperation with the Maryland State Department of Education, P. O. Box 8717, Friendship International Airport, Baltimore, Maryland 21240.

Maryland State Department of Education. *Maryland Model Bicycle Ordinance*. Baltimore, Maryland: Maryland State Department of Education, Safety Education and Transportation Section, P. O. Box 8717, Friendship International Airport, Baltimore, Maryland 21240.

Maryland State Department of Education. *Review of Research on Restraint Systems for School Buses*. Baltimore, Maryland: Maryland State Department of Education.

Maryland State Department of Education. Signal Light Program. Baltimore, Maryland: State Department of Education, P. O. Box 8717, Friendship International Airport, Baltimore, Maryland 21240, 1971.

Metropolitan Life Insurance Co. *Accident Prevention Can Be Learned*. Metropolitan Life Insurance Company, 1968.

Metropolitan Life Insurance Co. *Your Child's Safety*. Metropolitan Life Insurance Company, 1968.

Minister of Transport. *How to Organize a Crusader Cycle Club*. Toronto, Ontario, Canada: Minister of Transpart, Parliament Building.

Montgomery County Public Schools. Safety Handbook. Rockville, Maryland: Montgomery County Public Schools, 1970.

National Commission on Safety Education. A School Safety Education Program. 1201 16th St., N. W., Washington, D.C.: National Commission on Safety Education, National Education Association, 1966. ($.50 per copy).

National Commission on Safety Education. Bicycle Safety in Action. 1201 16th St., N. W., Washington, D. C.: National Commission on Safety Education, National Education Association, 1964.

National Commission on Safety Education. Our Schools Plan - Safe Living. 1201 16th St., N. W., Washington, D. C.: National Commission on Safety Education, National Education Association, 1966.

National Commission on Safety Education. Safety Guides for You - In the Intermediate Grades. 1201 16th St., N. W., Washington, D.C.: National Commission on Safety Education, National Education Association, 1962.

National Commission on Safety Education. Safety Guides for You - In the Primary Grades. 1201 16th St., N. W., Washington, D. C.: National Commission on Safety Education, National Education Association, 1961.

National Commission on Safety Education. School Safety Education Checklist. 1201 16th St., N. W., Washington, D. C.: National Commission on Safety Education, National Education Association, 1966.

National Congress of Parents and Teachers. Guide to School Pedestrian Safety Program. 700 N. Rush St., Chicago, Illinois: National Congress of Parents and Teachers, 1965.

National Highway Traffic Safety Administration. Automobile Safety Belt Activities Book Grades 4 thru 7. Washington, D. C.: U. S. Department of Transportation, 1972.

National Highway Traffic Safety Administration. Automobile Safety Belt Fact Book. Washington, D. C.: U. S. Department of Transportation, 1972.

National Highway Traffic Safety Administration. Teaching Children About Safety Belts. Washington, D. C.: U. S. Department of Transportation, 1972.

National Safety Council. *Catalog-Poster Directory*. 425 N. Michigan Ave., Chicago, Illinois: National Safety Council.

National Safety Council. *Guide to Traffic Safety - Articles, Pamphlets and Books.* 425 N. Michigan Ave., Chicago, Illinois: National Safety Council, 1969.

National Safety Council. *Improving Elementary School Safety*. 425 N. Michigan Ave., Chicago, Illinois: National Safety Council, School and College Department.

Curriculum and Instructional Materials

American Red Cross. Study Prints. The American National Red Cross. (9 study prints on General Safety. Each print contains teaching suggestions and student activities.)

Auxiliary to the American Optometric Association. Bicycle Safety Program. Shelbyville, Indiana: Auxiliary to the American Optometric Association, 144 West Broadway, Shelbyville, Ind.

Bicycle Institute of America. 9 Posters concerned with Bicycle Safety Procedures. 122 E. 42nd St., New York, New York: Bicycle Institute of America.

Canadien De La Securite. Bicycle Safety Program. 30 Driveway, Ottawa 4^{E}, Canada: Director of Programs Council.

Hogg, B. J. Skill Bees. Box 295,Route 1, Vicksburg, Missouri 49097: Child Tested Skill Builders, 1971. (The set includes filmstrips, slides and activities concerned with:
Basic Writing Strokes - Kit No. SKB-101
Figure Ground Discrimination
Multi-Match Cards - Kit No. SKB-600
Shapes - Kit No. SKB-200
Visual Motor Sequencing - SKB-100

Instructive Devices, Inc. How Do You Go To School? (Bus Safety. Pawtucket, Rhode Island, 02860: Instructive Devices, Inc.
Packet includes: 1 - 35mm filmstrip
1 - sing-a-long cassette
30 - cartoon booklets
1 - LP record
1 - talk-a-long cassette
12 - safety posters
Teaching Guide
This program covers 22 important rules for school bus safety in song, verse and narration.

Milton Bradley Company. Miniature Traffic Signs. Des Plains, Illinois 60018: Milton Bradley Company.

Milton Bradley Company. Useful Signs to See and Read. Des Plains, Illinois 60018: Milton Bradley Company. (Teaching aid for functional reading programs. Thirty large cards contain traffic, driver education and safety signs which children are likely to encounter in every day living. Suggestions for use are included.)

Nasca, Donald. Science Concepts and Processes - Gravity and Other Forces. Dansville, New York: F. A. Owen Publishing Co., 1966. (Study prints containing charts and experiments concerned with gravity and other forces.

Nasca, Donald. Science Concepts and Processes - Heat, Light and Sound. Dansville, New York: F. A. Owen Publishing Co., 1966. (Study prints containing charts and experiments with heat, light and sound.)

Nasca, Donald. The Instructor Primary Science Concept Charts, Light and Sound. Dansville, New York: The Instructor Publications, Inc., 1960. (The set includes 12 illustrated charts giving specific information on a primary level science subject. It also includes a teaching guide.)

National Child Safety Council. Safety Study Cards - Set No. 1 Child Accident Prevention Every Month (General Safety.) Jackson, Michigan: National Child Safety Council, 1966. (Set contains posters and manuals concerned with general safety, study guides and suggested activities on the back of the individual posters.)

National Safety Council. All About Bikes - A Bicycle Safety Program. Chicago, Illinois: National Safety Council.

National Safety Council. Teaching About Safety. 425 N. Michigan Ave., Chicago, Illinois 60611: National Safety Council. (Elementary Education Resource Units. These units offer a comprehensive but flexible guide for helping children to learn about safety. Each unit deals with an individual safety topic and is prepared on three levels (pre K through 1, 2 and 3, and 4 through 6.) Each level contains its own behavioral objectives, content outline and suggested learning and evaluation activity. Supplementary materials for copying and a list of additional resources are also included. An important feature of each unit is the introduction to the teacher which explains the basic goals of safety education and suggests ways in which the resource unit can be used. Units may be purchased separately.)

Office of the Superintendent of Public Instruction. Safety Education Units for Illinois Elementary Schools. Springfield, Illinois: Safety Education Section, 1972.

Scott Foresman and Company. Sounds I Can Hear. Oakland, New Jersey: Scott Foresman and Company. (Set contains posters, individual pictures and 33-1/3 recordings concerned with sounds in the house, school, neighborhood, farm and zoo.)

State Department of Education. Safety Today - Mississippi Pedestrian Safety Developmental School Guide. Mississippi: produced by the State Department of Education, a Federal Project of the U. S. Department of Transportation, National Highway Traffic Safety Administration.

Stuart, Francis R. Physical Fitness in Action. Dansville, New York: F. A. Owen Publishing Co., 1962.

Stuart, Francis R. Physical Fitness in Motion. Dansville, New York: F. A. Owen Publishing Company, 1962. (10 posters, 1 record chart and 40 classroom activities to develop sound bodies.)

Walt Disney Study Prints. Bicycle Safety Set No. 102. 545 Cedar Lane, Teaneck, New Jersey 60068: Walt Disney Films. (A series of 9 study prints based on the Walt Disney 16mm film titled, "I'm No Fool with a Bicycle." Each print contains teaching aids and suggested activities printed on the back.)

Walt Disney Study Prints. Fire Prevention. 545 Cedar Lane, Teaneck, New Jersey 60068: Walt Disney Films. (A series of 9 study prints based on the Walt Disney 16mm film titled, "I'm No Fool with Fire." Each print contains teaching aids and suggested activities printed on the back.

Walt Disney Study Prints. Pedestrian Safety Set No. 101. 545 Cedar Lane, Teaneck, New Jersey 60068: Walt Disney Films. (A series of 9 study prints based on the Walt Disney 16mm film titled, "I'm No Fool as a Pedestrian." Each print contains teaching aids and suggested activities printed on the back.)

Walt Disney Study Prints. School Bus Safety Set No. 104. 545 Cedar Lane, Teaneck, New Jersey 60068: Walt Disney Films. (A series of 9 study prints. Each print contains teaching aids and suggested activities printed on the back.)

Walt Disney Study Prints. School Safety Set No. 103. 545 Cedar Lane, Teaneck, New Jersey 60068: Walt Disney Films. (A series of 9 study prints. Each print contains teaching aids and suggested activities printed on the back.)

Films and Filmstrips

FILMS

Auto Passenger

Broken Glass. (16mm, color, 14 min.) Demonstrates value of seat belts. Available for loan from American Family Insurance, 3099 E. Washington St., Madison, Wisconsin.

How and Why to Use Safety Belts. (16mm, color, 8 min.) A definitive in-depth approach, dramatizing the need for safety belts, and explaining why safety belts save lives. Footage covers standard seat belts, lap-shoulder belts, full-harness belts, and includes the best current protection for the traveling child. Buckle assemblies and buckle adjustments for foreign as well as domestic model cars are explained in detail, with instructions for use and maintenance of these as well. Available from American Safety Belt Council, Inc., Public Education Office, P. O. Box 539, Los Angeles, Calif. 90028.

Love That Car. (16mm, color, 10 min.) Emphasizes the point that when a car is improperly maintained, many accidents can result. It should be mentioned, however, that dangerous practices are treated as humorous eccentricities throughout this film. At the end of the film safety belts are mentioned by the announcer who cheerfully reminds us to, "Keep your seat belt fastened."

Safety Belt for Susie. (16mm, color, 11 min.) Child's doll dramatizes need for seat belts in rear seat for children. Purchase or rent from University of Illinois, Visual Aids Center, Division of University Extension, Champaign, Ill., 1964.

She Purrs Like a Kitten. (16mm, color, 5 min.) A pair of elderly ladies in a chauffeur-driven car are busily chatting. The narrator says sarcastically that they have too many fascinating things to talk about to fasten their safety belts. The car stops suddenly and they both are shown getting up and back into their seats in a "comic" manner. In a second shot of the ladies later in the film, the narrator says that safety belts are important to car maintenance because you can avoid "body repairs." Again at the end of the film, he reminds viewers to keep their safety belts fastened. Available from Data Films, 2625 Temple St., Hollywood, California.

U. F. O. - Unrestrained Flying Objects. (16mm, 14 min.) Proves the reason for different types of seat belts. Available for loan from General Motors Corporation, Public Relations Staff - Film Library, General Motors Building, Detroit, Michigan 48102.

Bicycle

A Monkey Tale. (16mm, sound, B&W, 9 min.) A family of monkeys demonstrates both safe and unsafe ways to drive a bicycle. Available for purchase from Encyclopedia Britannica Films, 425 N. Michigan Avenue, Chicago, Illinois 60611.

Bicycle Rules of the Road. (16mm) Bicycle film for upper elementary grades, 1971.

Bicycle Safety. (16mm, sound, B&W, 11 min.) Driver responsibilities explored include bicycle maintenance and obeying traffic rules. Available for purchase from McGraw-Hill Company, Text-Film Division, 330 West 42nd Street, New York, New York 10036.

Bicycle Safety Program. (16mm) Film Loops, Inc., P. O. Box 2233, Princeton, New Jersey, 1971.

Bicycle Safety Skills. (16mm, sound, color or B&W, 11 min.) The theme, "good cyclists today, good motorists tomorrow," is emphasized. A youngster shows his small brother safety practices that make cycling safe as well as enjoyable. Available for purchase or rental from Coronet Instructional Films, 65 East Water Street, Chicago, Illinois 60601.

Bicycling Safely Today. (16mm, 20 min.) Pleasantly illustrates how cyclists can achieve full enjoyment from their wheels. It is the perfect film for solving safety problems in the community. Available on loan from the Bicycle Institute of America, 122 E. 42nd St., New York, New York 10017, 1972.

I'm No Fool with a Bicycle. (16mm) The bicycle, as Jiminy Cricket points out, is a wonderful invention - even more wonderful if we know the right way to do things with it. After tracing the history of the bicycle from its first invention in France around 1810 up to the modern safety bike as we know it today, Jiminy graphically describes the wrong and the right things to do with a bike. He's strongly recommending the latter, that is - "If you want to live to be 93." Available for rental or lease from Walt Disney Educational Materials Co., 495 Route 17, Paramus, New Jersey 07652, 1971.

Once Upon a Bicycle. (16mm, B&W, sound, 10 min.) In this film the young cyclist is likened to the driver of other vehicles. Under the guidance of a motorcycle officer, youngsters are shown how to drive their bicycles safely. Available from National Child Safety Council, 125 W. Pearl St., Jackson, Michigan. Free loan to members of the National Child Safety Council.

One Got Fat. (16mm, color, 13¼ min.) Ten bicycle drivers are prevented from reaching their destinations by individual mistakes. Purchase or rent from Henk Newhouse, Inc., 1017 Longaker Road, Northbrook, Illinois 60062, 1963.

Safety on Two Wheels. (16mm, sound) Produced and available from Aetna Life Insurance Company, Hartford, Connecticut.

Seven Rules of Bicycle Safety. (16mm, color, 6½ min.) 7 rules accepted by safety experts are demonstrated in this film for children. The positive approach is taken by showing only the right way to drive a bike. Purchase from Anthony Lane Film Studios, Inc., 7401 Wayzata Boulevard, Minneapolis, Minn. 55426, 1965.

Stop and Go On a Bike. (16mm, sound, color, 13 min.) A boy named Chuck discovers that courteous behavior on a bike is not only safer, but more fun. He learns his lesson with the help of two safety puppets and a policeman. Available on free loan from Association Films, Broad and Elm Streets, Ridgefield, New Jersey 07657.

The Bicyclists. (16mm, sound, color, 15 min.) A Danish film with English narration. The story of a lively red bicycle and its two owners; one who obeys all the rules and one who does not. Available for rental from Western Cinema Guild, 244 Kearny St., San Francisco, California 94108.

The Day the Bicycles Disappeared. (16mm, color, 14 min.) Safe and courteous bicycle driving habits are presented in fantasy form. Purchase from AAA Foundation for Traffic Safety, 1712 G St., N. W., Washington, D. C. 20006, 1966.

You and Your Bicycle. (16mm, B&W, 10½ min.) Hazards met on a trip to the store for mom, safety maintenance and correct driving habits are featured. Purchase or rent from Progressive Pictures, 1810 Francisca Court, Benifica, California 94510, 1961.

Your Bicycle and You. (16mm, sound, color, 13 min.) Compares bicycles and automobiles, discusses bicycle operation and care as well as rules of the road. Available for purchase from Modern Learning Aids, Division of Modern Talking Pictures, 3 E. 54th St., New York, New York 10022.

FILMSTRIP

I'm No Fool with a Bicycle. Riding a bicycle in 1810 in France was probably just as much fun as it is today in America... but even our modern safety bike can be dangerous. Jiminy Cricket traces the history of this popular invention and demonstrates the rules for safe riding. He urges children to keep their bikes in good working order and to follow automobile safe driving regulations. Available from Walt Disney Educational Materials Co., 495 Route 17, Paramus, New Jersey. 33-1/3 rpm record and filmstrip available from Maryland State Department of Education, Safety and Transportation, P. O. Box 8717, Friendship International Airport, Baltimore, Maryland 21240.

FILMS

School Bus

Bus Driver's Helpers. (16mm, color or B&W, 10 min.) Explains proper school bus conduct to elementary pupils. Available for purchase from AIMS Instructional Media Services, Inc., P. O. Box 1010, Hollywood, California 90028.

In Step with Safety. (16mm, color, 14 min.) Gives children the rules for school bus safety and the reasons for observing them. May be purchased from Robert M. Carson Productions, P. O. Box 1306, Winter Park, Florida 32790, 1960.

Safety on Our School Bus. (16mm, color or B&W, 11 min.) Film explains proper procedure for getting on and off a bus and six common sense rules for safe conduct while riding. Available for purchase from Encyclopedia Brittanica Educational Corp., 425 N. Michigan Ave., Chicago, Illinois 60611.

School Bus Patrol. (16mm, color or B&W, 14½ min.) Shows how a school bus patrol operates. Available for purchase or loan from AAA Foundation for Traffic Safety, 1712 G St., N. W., Washington, D. C. 20006.

School Bus Safety with Strings Attached. (16mm, B&W, 28 min.) Using folding chairs and student volunteers, the narrator creates a hilarious school bus ride to demonstrate the rules of passenger safety and etiquette. Stock No. 278.13. May be purchased from the National Safety Council, 425 N. Michigan Ave., Chicago, Illinois 60611, 1964.

The School Bus and You. (16mm, color, 10 min.) Designed to teach school bus safety and courtesy to elementary school children. Purchase or rent from Mogull's, 112-14 W. 48th St., New York, New York 10039, 1966.

FILMSTRIPS

Here's How We Ride a School Bus. (60 frames) Sponsored by the Ontario Department of Transportation. This filmstrip has been designed to encourage pupil participation and discussion. For this reason, there is no sound track. This provides full flexibility to meet every teaching situation.

School Bus Safety. (35mm strip, silent, B&W) Safety rules for school bus passengers. Available for purchase from Visual Sciences, P. O. Box 599, Suffern, New York 10901.

FILMS

Pedestrian

A First Film on Finding Your Way to School. (16mm, color, 9½ min.) Recognizing landmarks and understanding safety rules. Rental $6.50, sale $120.00, B. F. A. Educational Media, 2211 Michigan Avenue, Santa Monica, Calif. 90404.

Dick Wakes Up. (16mm, B&W or color, 13 min.) Dick, who had an accident because he ran into the street without looking, dreams in the hospital that he has two other selves named Good Judgment and Bad Impulse. He learns about good safety practices from their arguments. Available for purchase or loan from AAA Foundation for Traffic Safety, 1712 G St., N. W., Washington, D. C. 20006, 1955.

I'm No Fool as a Pedestrian. (16 mm) Ever since the Egyptians built the first paved roads in 3000 B. C., the pedestrian has been fighting for his life. The sidewalk, first invented in Paris in 1780, gave some relief but soon the automobile came and the pedestrian's life was again hazardous. To survive, the pedestrian has had to learn how to walk properly--where to walk--and when to walk. Only by following the rules can the pedestrian successfully reach his goal from one place to another. Available from Walt Disney Educational Materials, 495 Route 17, Paramus, New Jersey 07652, 1971.

Let's Stop and Go Safely. (16mm, 18 min.) Illustrates several street safety situations such as roller skating, running between parked cars, crossing intersections and how observing rules prevents accidents. Rental $4.50. Roa's Films, 1696 N. Astor Street, Milwaukee, Wisconsin 53202.

Look Alert - Stay Unhurt. (16mm, B&W, 14 min.) Emphasizes the causes of many pedestrian accidents and how they can be avoided. National Film Board of Canada.

On Your Own. (16mm, B&W or color) A captivating comparison of pedestrian safety rules and training with the training of an astronaut. Available for purchase from Sid Davis Productions, 2429 Ocean Park Boulevard, Santa Monica, California 90405, 1962.

Pedestrians. (16mm, B&W, 10 min.) Shows the problems for walkers and drivers when the two come into conflict. Available for loan from Ford Motor Company, Motion Picture Department, 3000 Schaefer Road, Dearborn, Michigan.

Step Lightly. (16mm, color, 14 min.) Narrated by John Daly. Proves that clothing with reflectorized trim protects pedestrians against night time traffic accidents. Available for loan from Advertising Department Traffic Control Products Division, 3M Center, 224-6W, St. Paul, Minn. 55101.

Timothy the Turtle. (16mm, 5 min.) Emphasis on watching for turning cars, American Automobile Association, Washington, D. C. ($13.00) (Part of the "Otto the Auto" Series), 1959.

When You are a Pedestrian. (16mm, 10 min.) Shows common practices among both pedestrians and drivers which lead to accidents. Animated models illustrate safety rules. Rental $3.50, intermediate. Roa's Films, 1696 N. Astor Street, Milwaukee, Wisconsin 53202.

FILMSTRIPS

I'm No Fool as a Pedestrian. Egyptians built the first paved roads in 3000 B. C. and pedestrians had to start dodging reckless chariot drivers...the first in a long history of walking safety problems. The sidewalk, invented in 1870 in Paris, gave some respite, but soon the automobile created more hazards. Jiminy Cricket tells how, when and where to walk in order to avoid accidents. Available from Walt Disney Educational Materials Company, 495 Route 17, Paramus, New Jersey 07652. 33-1/3 rpm record available from Maryland State Department of Education, Safety and Transportation, P. O. Box 8717, Friendship International Airport, Baltimore, Md. 21240.

Street Safety. Primary to intermediate. Color. Cost $6.50. McGraw-Hill Text-Films, 330 West 42nd Street, New York, New York 10036.

Walking to School. Primary, color. Curtis Publishing Company, Audiovisual Materials Division, Independence Square, Philadelphia, Pennsylvania 19105.

FILMS

School Safety

Donald's Fire Survival Plan. (16mm) Proves that something can be done to prevent needless and tragic loss of life because of fire. Donald and his nephews present a convincing solution to the problem. Each family must be prepared to follow a prearranged fire escape plan when fire strikes a home. The need for a plan--how to make a plan--and how to carry out a plan--is the vital message and the theme of this film. Available for lease or rental from Walt Disney Educational Materials Company, 495 Route 17, Paramus, New Jersey.

Handling Garden Tools Safely. (8mm, color, sound, 3 min., 15 sec.) Proper use of rakes, forks, shovels and other garden equipment as well as the importance of proper storage is illustrated through a real-life situation. Available from the Encyclopedia Brittanica Educational Corporation, 425 N. Michigan Avenue, Chicago, Illinois 60611, 1968.

Handling Knives and Scissors Safely. (8mm, color, sound, 2min.35 sec.) A youngster building a model airplane is the subject of this film that illustrates with animated diagrams the proper use of knives and scissors to avoid painful accidents. Available for purchase from Encyclopedia Britannica Corporation, 425 N. Michigan Ave., Chicago, Illinois 60611, 1968.

I'm No Fool with Fire. (16mm, color) A cave man first discovered he could produce fire by striking two rocks together and history reveals that since that time fire has been one of man's best friends as well as one of his deadliest enemies. From bitter experience, man has learned he must understand fire--how to start it--how to control it-- and how to put it out. Jiminy Cricket presents the basic rules of fire prevention and fire fighting summing up his philosophy when he states, "The best way to fight fire is not to have one in the first place." Available from Walt Disney Educational Materials 495 Route 17, Paramus, New Jersey 07652.

Junior Fire Department. (16mm, B&W, 20 min.) Shows how fire prevention education may be taught in public schools and how these lessons can influence fire safety at home. Purchase from Anisound Company, 1037 LaBrea Avenue, Hollywood, California.

Sixty Seconds to Safety. (16mm, B&W, 12 min) Points out common fire hazards in schools. Available for purchase, rent or loan from American Film Registry, 1018 S. Wabash, Chicago, Illinois 60605.

The Fire Triangle. (16mm, color or B&W, 13 min.) Demonstrates how firemen control fires by eliminating one of the three components of fire. Purchase or rent from University of Texas, Visual Instructional Bureau, Austin, Texas, 1962.

Trouble Takes No Holiday. (16mm, color, 17 min.) How a false alarm sparks a school campaign to re-educate pupils to be fire-safety conscious. Purchase or loan from Association Films, Inc., 600 Madison Ave., New York, N.Y. 10022, 1964.

FILMSTRIP

I'm No Fool with Fire. Long ago a caveman struck two rocks together and sparks flew...and ever since that time, mankind has been trying to control fire. Here Jiminy explains the dangers of fire, describes some of the advances our skill in using fire has made possible, outlines fire-fighting procedures, and presents basic fire prevention rules for young children to follow. Available from Walt Disney Educational Materials Company, 495 Route 17, Paramus, New Jersey 07652.

Games

Creative Playthings. Perception Plaques (a matching game). P. O. Box 1100, Princeton, New Jersey 08540: Creative Playthings.

Norbert Specialty Corp. Traffic Sign Bingo. New York, New York 10032: Norbert Specialty Corp.

Otto Maier Verlag. Positive and Negative (a perceptual matching game). New York, New York: manufactured by Otto Maier Verlag, Rauensburg, West Germany for Creative Playthings, a Division of CBS, Inc.

Resource Personnel

Frank Dagne, Superintendent
Rockfalls Elementary Schools
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600 Fourth Avenue
Rockfalls, Illinois 61071

Sister George Marie S.S.N.D.
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Student Activity Books

Glavach, Matt J., Stoner, Donovan. Puzzles and Patterns. Austin, Texas: Steck-Vaughn Company, 1970.

Glogau, Lillian, Krause, Edmund. Let's See. St. Louis, Missouri: American Optometric Association, 1970.

Hoffman, James. Come Play with Me. Birmingham, Michigan: The Instructional Fair, Inc., 1970.

Teacher Preparation

American Mutual Insurance Alliance. *Here's How - Traffic Safety Project Ideas*. Stromberg Allen and Co., 1963.

Anderson, William G. *Learning to Drive*. Reading, Massachusetts: Addison Wesley Publishing Company, 1971.

Ashley, Rosiland Minor. *Successful Techniques for Teaching Elementary Language Arts*. West Nyack, New York: Parker Publishing Company, Inc., 1970.

Baltimore City Public Schools. *Physical Education at the Early Elementary Level*. Baltimore City Bureau of Publications, 1968.

Baltimore County Board of Education. *Elementary School Physical Education*. Towson, Maryland: Baltimore County Board of Education, 1970.

Bloomer, Richard H. *Skill Games to Teach Reading*. Dansville, New York: The Instructor Publications, 1969.

Braley, William T., Konicki, Geraldine, Leedy, Catherine. *Daily Sensormotor Training Activities*. Freeport, L.I., New York: Educational Activities, Inc., 1968.

Bucher, Caleb W. *Activities for Today's Social Studies*. Dansville, New York: The Instructor Publications, Inc., 1965.

Bureau of Curriculum Development. *A Guide for Beginning Teachers of Reading*. New York: Board of Education of the City of New York, 1969.

Bureau of Curriculum Development. *Sequential Levels of Reading Skills*. New York: Board of Education of the City of New York, 1968.

Burke, Margaret B. *Look, Listen and Learn*. New York: Harcourt Brace and Javanovich, 1971.

Chandler, Bessie E. *Early Learning Experiences*. Dansville, New York: The Instructor Publications, Inc., 1970.

Corle, Clyde G. *Building Arithmetic Skills with Games*. Dansville, New York: The Instructor Publications, Inc., 1968.

Cratty, Bryant J. Movement Behavior and Motor Learning. Philadelphia: Lea and Febiger, 1967.

Cratty, Bryant J., Martin, Sister Margaret Mary. Perceptual-Motor Efficiency in Children. Philadelphia: Lea and Febiger, 1969.

Crescimbeni, Joseph. Arithmetic Enrichment Activities for Elementary School Children. West Nyack, New York: Parker Publishing Company, Inc., 1965.

Cunningham, Jean, Kirchner, Glenn, Warrell, Eileen. Introduction to Movement Education. Dubuque, Iowa: William C. Brown Company Publishers, 1970.

Egstrom, Glen, Latchlaw, Marjorie. Human Movements. Englewood Cliffs, New Jersey: Prentice Hall, 1969.

Farina, Albert M., Furth, Sol H., Smith, Joseph M. Growth Through Play. New Jersey: Prentice Hall, Inc., 1959.

Gerhard, Muriel. Effective Teaching Strategies with Behavioral Outcome Approach. West Nyack, New York: Parker Publishing Company, Inc., 1971.

Getman, G. N., Halgren, Marvin R., Kane, Elmer R., McKee, Gordon W. Developing Reading Readiness. New York: Webster Division, McGraw Hill Book Company, 1968.

Hall, Mary Yates. Rescue. Stevensville, Michigan: Educational Service, Inc., 1969.

Hall, Mary Yates. Simple Science Experiences. Dansville, New York: The Instructor Publications, Inc., 1968.

Holt, John. How Children Learn. New York City: Pitman Publishing Company, 1967.

Hopkins, Lee Bennett, Shapiro, Annette Frank. Creative Activities for the Gifted Child. Palo Alto, California: Fearon Publishers, 1969.

Hutson, Natalie B. Stage. Stevensville, Michigan: Educational Service, Inc., 1968.

Karp, Etta E., Russell, David H. Reading Aids Through the Grades. Columbia University, Teachers College Press, 1969.

Krumboltz, John D., Krumboltz, Helen B. Changing Children's Behavior. Englewood Cliffs, New Jersey: Prentice Hall, 1972.

Latchlaw, Marjorie. A Pocket Guide of Movement Activities for the Elementary School. Englewood Cliffs, New Jersey: 1970.

Lewis, James, Jr. Administering the Individualized Program. West Nyack, New York: Parker Publishing Company, Inc., 1971.

Maryland State Department of Education. Guide for the Selection and Training of School Bus Drivers in Maryland. Baltimore: Maryland School Bulletin, 1961.

McGuire, Mabelle B. Finger and Action Rhymes. Dansville, New York: The Instructor Publications, Inc., 1966.

Montgomery County Public Schools. K-6 Physical Education Course of Study. Rockville, Maryland: Board of Education of Montgomery County, 1966.

Mosston, Muska. Developmental Movement. Colombus, Ohio: Charles E. Merrill Publishing Company, 1965.

Platts, Mary E. Create. Stevensville, Michigan: Educational Service, Inc., 1967.

Platts, Mary E. Plus. Stevensville, Michigan: Educational Service, Inc., 1964.

Platts, Mary E. Spice. Stevensville, Michigan: Educational Service, Inc.

Rainwater, Janette. Vision, How, Why and What We See. New York: Golden Press, 1962.

Roy, Mary M. Action. Stevensville, Michigan: Educational Service, Inc., 1967.

Roy, Mary M. Probe. Stevensville, Michigan: Educational Service, Inc., 1962.

Roy, Mary M. Spark. Stevensville, Michigan: Educational Service, Inc., 1965.

Russell, Elizabeth F., Russell, David H. Listening Aids Through the Grades. New York: Teacher's College Press, 1971.

Sanders, Norris M. Classroom Questions: What Kinds?. New York: Harper and Row, 1966.

Scharzer, Alfred, Suchman, Edward A. Current Research in Childhood Accidents. New York, New York: Association for the Aid of Crippled Children, 1960.

Slingerland, Beth H. Training in Some Prerequisites for Beginning Reading. Cambridge, Massachusetts: Educators Publishing Service, 1967.

Sloane. Erie. Book of Storms. New York: Duell, Sloan, Pearce, 1956.

Stratemeyer, Clara G. Accident Research for Better Safety Teaching. Washington, D. C.: National Education Association, 1964.

Stokes, Edward J. Physical Science Experiments. Dansville, New York: The Instructor Publications, Inc., 1966.

Stone, Alfred. Caution: Driving Ahead. Austin, Texas: Steck Vaughn Company, 1972.

Sutton, Ann and Myron. Nature on the Rampage. New York, New York: J. B. Lippinsett Company, 1962.

Thompson, Philip D., O'Brien, Robert, and the Editors of "Time-Life" Books. Weather. New York: Time-Life Books, 1968.

Tufty, Barbara. 1001 Questions Answered About Natural Land Disasters. New York: Dodd, Mead and Company, 1969.

Van Witsen, Betty. Perceptual Training Activities Handbook. New York: Teacher's College Press, 1967.

Vernon, M. D. Perception Through Experience. Great Britain T and A Constable Ltd., Distributed in U. S. A. by Barnes and Nobel, Inc., 1970.

Vogel, Charles. Trails Manual. Hollywood, California: Equestrian Trails, Inc., 1968.

Ward, Evangeline H. Early Childhood Education. Dansville, New York: F. A. Owen Publishing Co., 1968.

Wickstrom, Ralph L. Fundamental Motor Patterns. Philadelphia: Lea and Febiger, 1970.